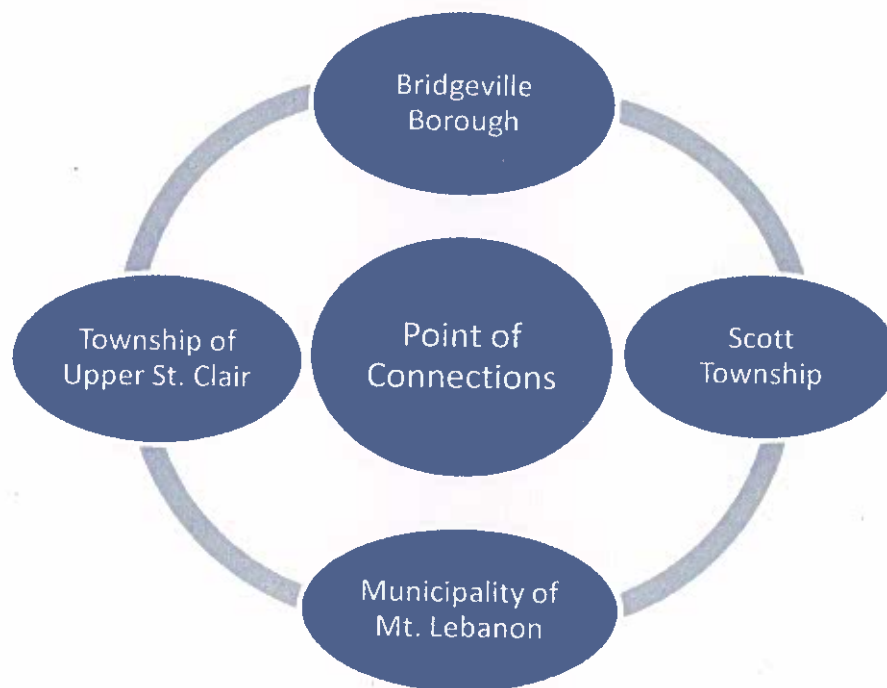


Chartiers Cooperative Agreement Committee Point Of Connections Report



Prepared in Conjunction With A Grant From 3RWW
John Schombert, Executive Director

Committee Managers/Members:

Lori Collins, Bridgeville Borough
Stephen Feller, Municipality of Mt. Lebanon
Denise Fitzgerald, Scott Township
Matthew Serakowski, Township of Upper St. Clair

George Kostelich, Public Works Director USC
Dave Kutschbach, Superintendent of Projects

Committee Engineers:

Lawrence J. Lennon, P.E., D. WRE, Lennon, Smith, Souleret Engineering Inc.
Ruthann L. Omer, P.E., The Gateway Engineers, Inc.

Committee Solicitors:

Richard Ferris, Esquire
Brock McCandless, Buchanan Ingersoll
Gavin Robb, Tucker Arensberg
Daniel Perry, Tucker Arensberg
Philip Weis, Buchanan Ingersoll

June 30, 2011

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

Executive Summary

The purpose of the Chartiers Cooperative Agreement Report is to provide background and context to facilitate discussions for development of Intermunicipal Service Agreements among various communities that will share wet weather facilities to be constructed pursuant to implementation of the local municipal portions of the Allegheny County Wet Weather Plan. This effort has been funded through a grant made available to 3 Rivers Wet Weather Program.

3 Rivers Wet Weather has been an active partner with the 84 municipalities comprising the ALCOSAN system facilitating various aspects of development of a consensus driven acceptable Wet Weather Plan for Allegheny County. Among those activities is the establishment of the Feasibility Study Working Group (FSWG) whose purpose has been to develop consistent approaches and guidelines for preparation and adoption of the "Feasibility Study"(s) that are due to Allegheny County Health Department (ACHD) and PA DEP in July 2013. An adjunct sub-committee of the FSWG, the Intermunicipal Service Agreement Subcommittee, prepared a Table of Contents topical outline listing the items, or issues to be addressed in preparing an Intermunicipal Service Agreement (ISA). That outline, (listed as Exhibit A), was reduced to ten (10) common topics for further development. Pursuant to this desire White Papers designed to further develop these matters have been prepared.

These White Papers are presented in order in the following sections of this report. They are as follows:

Name of White Paper	Author
Ancillary	The Gateway Engineers, Inc.
Capacity Allocation & Planning Module Approval	Lennon, Smith, Souleret Engineering Inc.
Capital Improvements	The Gateway Engineers, Inc.
Cost Sharing & Billing	Lennon, Smith, Souleret Engineering Inc.
Financing Options	Tucker Arensberg, Attorneys
Intermunicipal Service Agreement	Tucker Arensberg, Attorneys
Memorandum of Understanding	Buchanan Ingersoll
Operation & Maintenance	The Gateway Engineers, Inc.
Ownership & Permitting	Lennon, Smith, Souleret Engineering Inc.
Recitals	The Gateway Engineers, Inc.

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

The White Papers were authored either by Ruthann L. Omer, P.E., The Gateway Engineers, Inc. or Lawrence J. Lennon, P.E., D., WRE, Lennon, Smith, Souleret Engineering Inc., Gavin Robb, Esquire, and Daniel Perry, Esquire, both from Tucker Arensberg and Brock McCandless, Esquire from Buchanan Ingersoll. The papers were subsequently discussed by the Chartiers Cooperative Committee comprised of Denise Fitzgerald, Manager of Scott Township, Stephen Feller, Manager Municipality of Mt. Lebanon, Matthew Serakowski, Manager Township of Upper St. Clair, Lori Collins, Manager Bridgeville Borough, John Schombert, Executive Director 3 Rivers Wet Weather, George Kostelich, Director of Public Works Township of Upper St. Clair and Dave Kutschbach, Superintendent of Projects Township of Upper St. Clair, Gavin Robb, Esquire, Tucker Arensberg, Brock McCandless, Esquire, Buchanan Ingersoll, Philip Weis, Esquire, Buchanan Ingersoll, Rich Ferris, Esquire over a three month period.

The intent of the project was not to complete a model ordinance but rather to present concepts and issues to discuss. The committee recognizes that each individual municipality must review the situation and negotiate what works best for their municipality.

Exhibit A

3 Rivers Feasibility Study Working Group
Inter-municipal Agreement Subcommittee
(Expanded) Multi-municipal Agreement Outline
Latest Revision: February 2, 2010

Typical Agreement Topics

1. Operations
2. Joint Authority Formation
3. Sale
4. Maintenance
5. Construction

Agreement Content / Outline

Note: the intent of this Multi-municipal Agreement Outline is to provide general information on articles to be considered in the development of a new or modified agreement between municipalities for construction, operation, and maintenance of share sewage conveyance facilities. The point where detail is provided are considered to be primarily technical in nature and the details is considered only from a technical standpoint. It is completely acknowledged that the parties' solicitors will provide a major service in the development of the agreement and there is an incomplete list of primarily legal issues at the end of this document.

Preamble (intended to set the stage for the agreement; may become the Whereas clauses; not intended to provide details that are best covered in the various articles)

1. Identify parties to the agreement
2. Purpose and objectives
 - a. Why the agreement is being prepared and executed
 - i. Identify existing common/shared facilities
 - ii. Define geographical area (boundary) covered by the Agreement
 1. Attach a Map or exhibit of the area of concern
 - iii. Identify current and proposed Ownership and operation of "common" facilities
 - iv. Define intent to achieve equitable cost sharing
 - v. Define intent to establish equitable /pro rate share of:
 1. Capacity
 2. Debt Service and
 3. Operating costs
3. Identify Regulatory Permits pertinent to the Agreement
 - a. Copy of permit attached

4. Identify and / all prior agreements and identify action to be take
 - a. replace,
 - b. modify or
 - c. supersede

5. Identify Shared facilities
 - a. Define Ownership of common facilities
 - i. Joint entity
 - ii. Individual municipal entity
 - b. Identify Permit holder

6. Describe responsibilities of each party to the agreement relative to;
 - a. Regulatory Orders
 - b. Participate and appoint members

Articles (to be included in agreements only to the extent applicable to the new agreement)

1. Definition Section

Intended to define any terms used in the agreement. For example:

- a. Participant communities: community's party to and executing the agreement
- b. Non-participating communities: communities tributary to common facilities but not party to or executor of agreement

2. Right of Usage

Intended to define the relationship and rights of the respective of parties (previous and future)

3. System Usage

Untended to define permissible and prohibited discharges into the system, making reference to adopted:

- a. Sewer use ordinances
- b. Rules and Regulation
- c. Pretreatment Program (ALCOSAN) and
- d. Allegheny County Plumbing Code

4. Service Area

Intended to define existing service areas and future expansion service areas as defined by maps, drawings, or GIS data base system

5. Capacity Allocation and Basis (existing and future)

Intended to define the basis for and allocated capacity granted to or bought by each participant in the agreement, and to dine any surplus pipe capacity and how surplus pipe capacity is to be allocated.

6. Planning Module Approvals

Intended to define the approval process and approval schedule for Planning Modules within allocated capacity and for Modules that may exceed allocated capacity, and to prohibit "unreasonable withholding" of Planning Module execution.

7. Construction Standards

Intended to encourage uniformity by identifying and defining construction standards for the share facilities and all tributary systems

- a. To include Agency regulations, and
- b. Development and adoption of uniform construction standards

8. Initial Fees

Intended to identify and define any initial fees to be shared/levied among the Participating Communities. For example:

- a. cost share for an Engineering Feasibility Study to assess common facility upgrade requirements
- b. cost share for common facility upgrade
- c. buy-in costs for new non-participating

9. Tap Fees and Distribution

Intended to establish a Tap Fee for shared facilities and whether a Tap-in Fee for "new" users in tributary Participant Communities will be levied for shared global facilities, and how tap-in fees for individual communities will be levied.

10. Professional Service

Intended to identify expert assistance to be obtained relative to the implementation of the Agreement and operation of the facilities. As such, the agreement may require retention of an independent Account, Solicitor, or Engineer to provide an annual report.

11. Ownership

Intended to identify the ownership of all facilities within the service area

12. Participant's Responsibility

Intended to require:

- a. payment of reasonable, established operating costs & fees to Owner
- b. agreement to properly regulate discharges into the system
- c. pursuit & completion of any necessary internal system improvements required to maintain compliance with requirements identified in the Agreement

13. Billing Basis and Payment

Intended to set the terms of billing and payment for costs of operation and maintenance capital improvement, administration, etc. for the shared facilities.

For example, on the basis of :

- a. EDUs

- b. Sewage flows (agreed volumes or additional flows beyond the agreed volumes)
 - c. Water consumption
- 14. Operation & Maintenance Responsibilities
Intended to define which parties are responsible to operate and maintain which Portion of the system
- 15. Capital Improvements Responsibilities
Intended to:
 - a. define which party is responsible to implement any required Capital Improvements
 - b. Set forth how Capital Improvements are to be identified, agreed to, and who is responsible to design and implement, and
 - c. define cost share
- 16. Responsibility for Construction
Intended to define responsibility for construction within individual community Service areas & consider contract arrangement related to multiple municipalities
- 17. Approval of Unforeseen Expenditures
Intended to require discussion of expenditures outside the approved annual budget and above a certain cost limit or percentage to be "approved" by all parties.
- 18. Annual Budget
Intended to require preparation, circulation and approval of an annual budget for the shared facilities by all parties. The parties responsible for preparation of the budget should be identified.
- 19. Regulatory Directives
Intended to require compliance with any future regulatory directives, and to acknowledge cost sharing of required costs related to regulatory directives.
- 20. Meetings
Intended to describe frequency, time and place of joint meetings to review:
 - a. Budget
 - b. Operations
 - c. Proposed capital improvements, and
 - d. Regulatory issues
- 21. Terms of Agreement
Intended to set the "life" and end date, if any, of the agreement. If no termination date is certain, then to define an action that would terminate the agreement such as payment of all debt service.

22. Reopener (non-default)

Intended to describe conditions or events prerequisite to reopening the agreement to address modifications, such as flow distribution, additional service area, or reallocation of capacity.

Potential Attachments/Exhibits

1. Prior agreements
2. Example (sample) calculations
3. Sample budget with accounts
4. Maps and drawings
5. Permits

Legal Issues (to be considered by the Solicitor, not intended to be all-inclusive)

1. Hold harmless clause
2. Warranty
3. Dispute resolution
4. Successors and assigns
5. Contract Approved by resolution or ordinance
6. Severability
7. Termination
8. Compliance issues
9. How to apportion regulatory fines
10. How to address changes in ALCOSAN rules, regulations and policies
11. Board representation – how are decisions made
12. Recording of the Agreement with the County Department of Real Estate
13. Default

White Paper

Ancillary

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

Ancillary Items

Definitions

Approval of Unforeseen Expenditures – intended to require discussion of expenditures outside the approved annual budget and above a certain cost limit or percentage to be “approved” by all parties.

Regulatory Directives – Intended to require compliance with any future regulatory directives, and to acknowledge cost sharing of required costs related to regulatory directives.

Meetings

Representation:

- How many members
- How many from each community

Intended to describe frequency, time and place of joint meetings to review:

- Budget
- Operations
- Proposed capital improvements, and
- Regulatory issues

Insurance Requirements - It should be reviewed what insurance is necessary and how much.

White Paper

**Capacity Allocation
&
Planning Module Approval**

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

**CAPACITY ALLOCATION AND PLANNING MODULE APPROVAL
WHITE PAPER**

Primary Author: Lawrence J Lennon, P.E., D. WRE

This document has been prepared by the primary author and reviewed by a committee of engineers and managers representing the Borough of Bridgeville, the Municipality of Mt. Lebanon, and the Townships of Scott and Upper St Clair under a grant received from 3 Rivers Wet Weather .

This White Paper addresses two related topics within the context of an ISA:

1. Capacity allocation, and
2. Planning Module approvals.

CAPACITY ALLOCATION

Overview

Capacity allocation addresses the concept that some defined “portion” of the total hydraulic capacity of any shared facilities is “owned” by each of the respective parties to the Intermunicipal Service Agreement (ISA). The premise is that the total capacity of the shared facility would be specifically allocated either among the various parties or to a reserve for undefined future use (i.e., unallocated reserve). To the extent that the various entities underwrite the cost of the facilities, it will be expected by each entity that the respective entity owns some proportional share of the capacity and that such capacity will remain available to the respective entity for current or future use or for resale.

The capacity allocation section of an ISA will set forth the basis of allocation. This section should accomplish the following:

- Establish the foundation for regulation of current and future use of constructed shared facilities,
- Appropriately distribute the capacity granted to or bought by each participant in the agreement, and
- Define reserve pipe or basin capacity, if any, and how that reserve capacity is to be utilized.

Of paramount importance is the requirement that capacity be allocated on measurable well-defined parameters, preferably based on factors that have some relationship to the size and cost of the facilities as well as the respective usage. For the types of

facilities being evaluated for separate sanitary sewer systems, wet weather flow rate and volume are the primary driving capacity parameters.

It is recommended that the capacity of currently existing conveyance facilities be allocated very early in the discussion process. In this regard, attention should be given to current agreements, design documents, ownership, original share of capital costs, and direct accumulated O&M and repair costs for the facilities.

For proposed solutions, with the probable exception of source flow reduction, the facilities to be constructed pursuant to Wet Weather Plan implementation will require issuance of a Part II Water Quality Management (WQM) Permit by the Pennsylvania Department of Environmental Protection (PaDEP). This Part II WQM Permit requires preparation and submission of a Design Engineer's Report that sets forth the computations and parametric basis for the design of the facilities. The Design Engineer's Report should clearly specify and set forth the design parameters including the population basis, the design year, and the design storm, as well as the flow rate (Q_p) and the volumetric (Q_{vol}) design basis for all shared facilities. The Design Engineer's Report should clearly define the existing and future hydraulic capacity needs associated with all municipal entities to be included within the facilities. Ideally, the facilities will be based on a properly calibrated, verified, continuous simulation hydraulic and hydrologic (H&H) model that has been developed by consensus of the engineers involved. Properly performed, this information can serve as the basis for pro rata distribution of design capacity.

One of the many issues that must be addressed is how and whether unused and/or excess capacity effectively "appropriated" by "others" will be subject to cost reimbursement.

To avoid future misunderstandings, it is strongly suggested that the agreements should incorporate capacity allocation tables, such as the following examples:

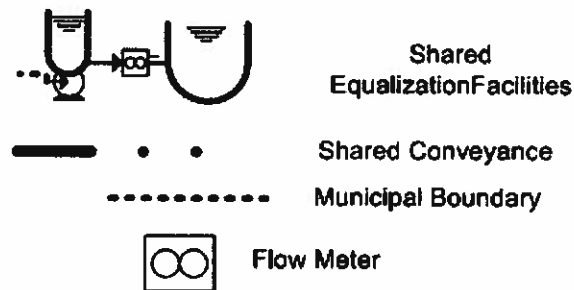
EQUALIZATION BASIN CAPACITY ALLOCATION				
Party to Agreement	Average Daily Flow Rate (mgd)	Max. Month Flow Volume (MG)	EDUs	Reserve Capacity (MG)
City A				
Borough B				
Township C				
Township D				
Unallocated Reserve				
Total				

TRUNK SEWER CONVEYANCE CAPACITY ALLOCATION					
Party to Agreement	Average Daily Flow Rate (mgd)	Max. Day Flow Volume (MG)	Peak Instantaneous Flow Rate (mgd)	Reserve Capacity (mgd)	EDUs
City A					
Borough B					
Township C					
Township D					
Unallocated Reserve					
Total					

Capacity allocation can be a complex process, depending upon the location and number of points of connection (POCs) of the various municipal parties to the shared conveyance facilities. The possibilities range from the simple, where the municipal connections are linear, singular in terms of jurisdiction, in sequence, and are upstream of a metering point, to the more complex, where there are multiple random alternating POCs for the multiple entities. It is suggested that, at the outset, a schematic layout of the shared facilities including all POCs for each entity should be prepared. This layout should facilitate understanding and discussion among the parties involved. Examples are presented below.

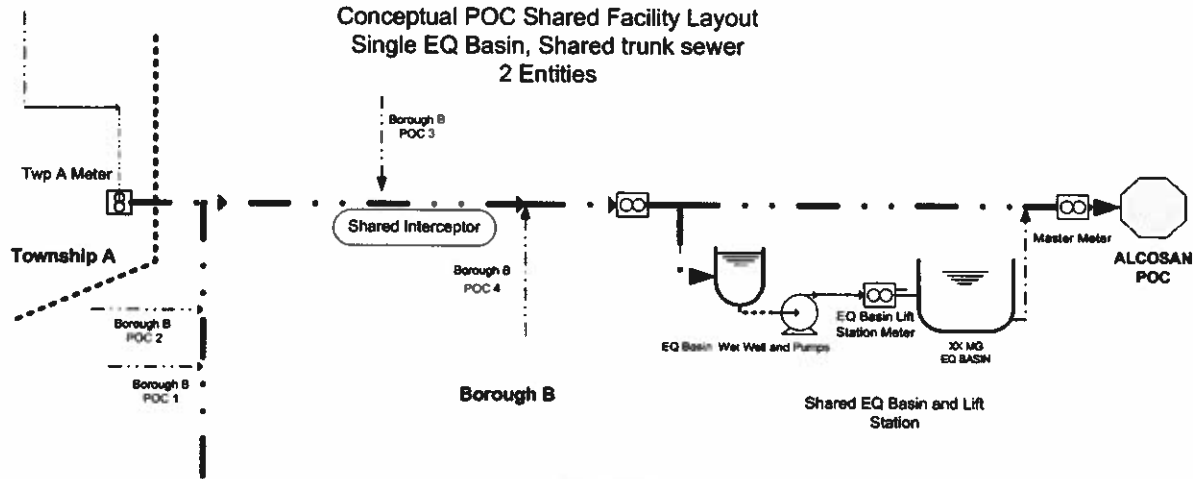
Schematic Diagram Legend

The following schematic diagram legend is used to illustrate alternatives. The bold double dot long dash line represents a shared trunk or interceptor sewer facility, the municipal boundary is shown in a dashed format, and the metering points and ALCOSAN POC are indicated, as are equalization facilities generally consisting of pumping and tank facilities. Individual borough/township collection system POCs are shown in a lightweight double dot dash format.



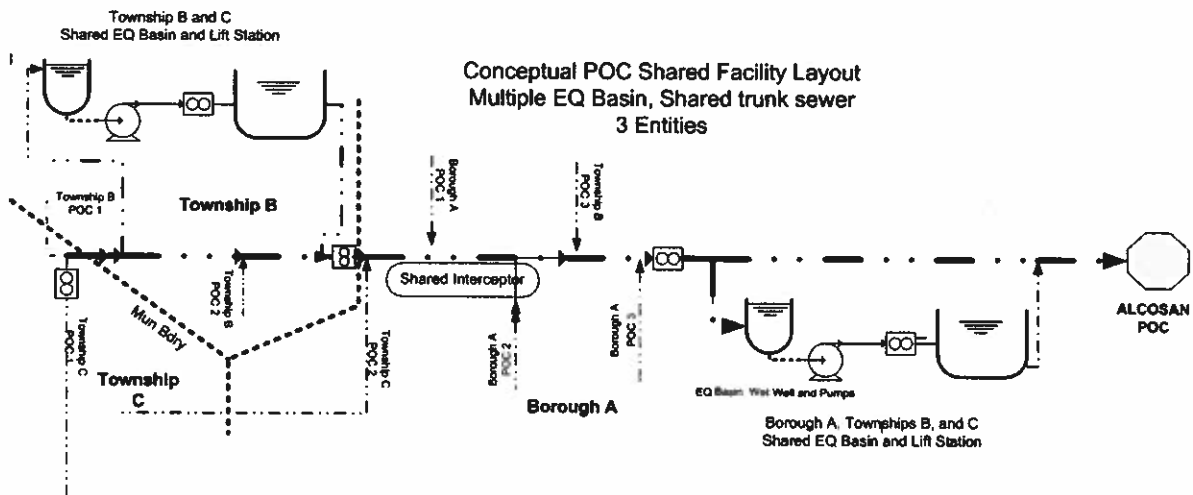
Simple Layout

This simple layout diagram presents an example of two adjacent municipal entities with no unmetered collection sewers crossing over municipal boundaries into an adjacent municipal system. All Township A flow is monitored upstream of its connection to the trunk sewer shared with Borough B. Flow upstream of the equalization facilities, including flow from both Township A and Borough B, is metered to establish the sources of flow, and is metered again at the ALCOSAN POC.



Complex Layout

This diagram presents a complex layout of a situation in which three municipalities are involved, multiple equalization facilities are needed, and individual unmetered collection system sources cross municipal boundaries below the metered points.



CAPACITY ALLOCATION METHODOLOGY

Similar to the cost sharing element discussed elsewhere, capacity allocation methodologies may be based on one or any combination of the following:

- “Agreed upon” basis
- Water consumption
- Wastewater flow (“pay to play”), monitored or unmonitored
 - Peak rate of flow
 - Average daily volume, maximum monthly flow volume
- Equivalent Dwelling Units (EDUs) or population
- Hydrologic and hydraulic (H&H) model
- Ratio basis
 - Peak Wet Weather Flow/Dry Weather Flow(PWWF/DWF)
 - Wet day/dry day
- Strength of flow

“Agreed Upon” Basis

The theory here is that the various parties can simply agree on a basis for allocating capacity without regard to engineered capacity of the facilities. The shares may be arbitrary and could be predicated on any reasonable concept agreeable to all such as the following:

- Negotiated percent
- Gross or net acreage
- Land use
- MHI ratio

Water Consumption

The theory here is that measured water consumption will be the basis as a “knowable/measurable” quantity today and in the future, thus providing a mechanism for control. The allocation should be based on a reasonable time period volume such as 30 days (month), 90 days (quarter), or 365 days (annual). Any of the following may be used:

- Average period flow volume
- Ratio of short-term average (stipulated) to long-term average (stipulated) (e.g., maximum month/annual average)

Wastewater Flow (“Pay to Play”)

The theory here is that the various parties can simply agree to utilize actual or, in the case of unmonitored systems, estimated wastewater flow as established at specific points in or on the shared facilities. (N.B. Flow monitoring limits and issues as described in the Cost Sharing White Paper are not repeated but are equally applicable here as well.)

- Monitored
 - Peak instantaneous rate of flow (mgd)
 - Average daily volume (MG), maximum day flow volume (MG)
- Unmonitored
 - Average or maximum daily flow volume (MG); however, estimates to be based on FSWG Document 028

Equivalent Dwelling Units (EDUs)/Population

The theory here is that the various parties can simply agree to use a customer count surrogate for flow such as EDUs or population. The Design Engineer's Report should establish design capacity related values for the surrogates. In all cases, the evaluation should include consideration of existing and projected future build out based on adopted land use/zoning and, as appropriate, either Southwestern Pennsylvania Commission or local Planning Commission population projections.

Hydrologic and Hydraulic (H&H) Model

For the more complex situations as presented in the complex schematic above, a properly calibrated H&H model may be the only mechanism for a design based capacity allocation, particularly for the conveyance aspects. The first step will be to have the various parties agree to utilize theoretical models as the basis for capacity allocation. Flow monitoring at key locations within the system is a necessary requirement of calibration and validation. Once established and agreed upon, a model can be updated as needed or at stipulated periodic intervals (e.g., every five years) to provide a compliance check. Given the cost and use of the H&H model, it is important that it results in a product that is acceptable to designated technical representatives of the various parties to an agreement. It is recommended that any such modeling effort clearly identify and define the following flow components:

- Base Waste Water Flow (BWFF), i.e., "sewage" allocation
- Ground Water Infiltration (GWI) allocation
- Rainfall Derived Infiltration and Inflow (RDI/I) allocation

Ratio Basis

This methodology is based on the relationship of peak flows to average flows. It is a variation of the wastewater flow based methodology. Examples of ratios that could be utilized include the following:

- Peak Wet Weather Flow / Dry Weather Flow (PWWF/DWF)
- Wet day/dry day

Strength of Flow

As noted in the Cost Sharing White Paper, the strength of flow is typically a concept applied to treatment facilities, although it might be considered for equalization basins. The primary difficulty is to perform adequate sampling and analysis so as to properly characterize strength. This includes establishing the number of samples to be analyzed, as well as the technique (composite versus grab samples). Parameters that may be considered include the following:

- Floatables
- Fecal coliform
- BOD₅
- Total suspended solids

PLANNING MODULE APPROVALS

Overview

The second topic of this White Paper is Planning Module processing. Approval of Planning Modules is a key aspect of local municipal land use development and redevelopment. Within Allegheny County, subdivision and land development approval requires certain "Municipal Declarations" to be recorded on the Plan documents. Among the Allegheny County mandated declarations is the following:

*"No building permits without approved sewerage facilities. The (Name of Municipality) agrees not to issue building permits until the 'Planning Module for Land Development' has been approved in accordance with the regulations of the Pennsylvania Department of Environmental Protection."*¹

The following paragraph has been directly excerpted from the Instructions for Completing Component 3 Sewage Collection and Treatment Facilities:

*This component is used when any of the following are proposed: 1) a subdivision served by sewage collection, conveyance or treatment facilities, 2) a tap-in to public sewers with flows on a lot of 2 Equivalent Dwelling Units (EDUs) or more, or 3) the construction or modification of wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. A sewer **EXTENSION** is defined as the construction of a sewage collection system to serve more than one tap-in. Sewer lines that cross property lines are also sewer extensions. A **TAP-IN** is defined as a connection to an existing sewage collection system².*

¹ "Allegheny County Subdivision and Land Development Ordinance of 1998," Appendix 2-6.

² Pennsylvania Department of Environmental Resources, Form 3800-FM-WSFR0353 5/2007.

Section J Chapter 94 Consistency Determination of PaDEP Sewage Facilities Planning Module Component 3 (copy attached) requires certification and sign off regarding system capacity at three levels:

1. Collection System,
2. Conveyance System, and
3. Treatment Facility.

Under the ISAs to be executed, the "Collection System" can be any of the individual municipalities that are party to the Agreement. The "Conveyance System" will be completed by the downstream entity owning and operating the shared facilities as well as ALCOSAN for interceptor sewers, and the "Treatment Facility" is ALCOSAN. Component 3 Section J has a certification that stipulates that the person signing the form is "... legally authorized to make representation for the organization."³

This portion of an ISA is intended to define the approval process and approval schedule for Planning Modules for land developments within the various communities that are party to the ISA. The presumption underlying this section is that the various facilities are within allocated capacity and that there is capacity available to allocate to the development being considered. The section could also address Planning Modules for developments that may exceed specified allocated capacity. To promote ongoing cooperation, it is suggested that this section include language to prohibit "unreasonable withholding" of Planning Module execution.

Planning Module Processing

Incorporation of language similar to the following is suggested:

The Parties to the Agreement agree that they will submit all proposed Land Development Planning Modules for all Land Developments within their respective jurisdiction to the (Name of Shared Facility Owner) for review and execution of the Conveyance and/or Treatment Capacity portion of the Planning Module. (Name of Shared Facility Owner) warrants that, for all such Land Developments that are within the capacity limits specified herein, the (Name of Shared Facility Owner) and all parties to the Agreement shall expeditiously review and approve duly submitted PaDEP Planning Modules and shall not unreasonably withhold said approval.

³ Pennsylvania Department of Environmental Resources Form 3800-FM-WSFR0353 5/2007, Page 6.



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

Remove and recycle these instructions prior to mailing component to the approving agency.

INSTRUCTIONS FOR COMPLETING COMPONENT 3 SEWAGE COLLECTION AND TREATMENT FACILITIES

How to Obtain Planning Module Components

Planning module components appropriate to your project can be obtained by completing an "Application for Sewage Facilities Planning Module" mailer and sending it to the agency responsible for final review of your project (or the "approving agency"). This "approving agency" may be either DEP or a "delegated local agency" which is a local agency that has received planning approval delegation from DEP under Act 537. If you are unsure of where to send your mailer, contact the DEP regional office serving your county for help. **Do not use this component unless you have received a properly code-numbered copy from DEP or the delegated local agency.** You may obtain an Application for Sewage Facilities Planning Module mailer from the municipality, the delegated local agency, a DEP Regional Office or on DEP's Web site at www.depweb.state.pa.us, Keyword: "Wastewater".

Upon receipt of the mailer, the "approving agency" (DEP or delegated local agency) will determine if your project is required to complete sewage facilities planning under Act 537. If planning is not required under Act 537, you will be informed by letter. If planning is required, the agency will assign a code number to your project and provide you with the correct planning module forms and instructions.

When Should You Use Component 3?

This component is used when any of the following are proposed: 1) a subdivision served by sewage collection, conveyance or treatment facilities, 2) a tap-in to public sewers with flows on a lot of 2 Equivalent Dwelling Units (EDUs) or more, or 3) the construction or modification of wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. A sewer **EXTENSION** is defined as the construction of a sewage collection system to serve more than one tap-in. Sewer lines that cross property lines are also sewer extensions. A **TAP-IN** is defined as a connection to an existing sewage collection system.

Who Should Complete the Component?

This component should be completed by a consultant, engineer, or surveyor who is familiar with the municipality's Official Plan and available sewage disposal methods in the municipality in which the development project is proposed. Municipal and sewage authority officials should be consulted in the development of the project. Sections A through I, and Sections O through R must be completed for all projects. Section J, K, L, M and/or N should be completed only if applicable or marked. The following instructions provide general guidelines on completing the component.

Instructions for Completing Component 3

SECTION A. PROJECT INFORMATION

Project Name. In the "Project Name" block, enter the name by which this proposed land development project is, or will be, known, such as "Smith Subdivision".

Brief Project Description. Briefly describe the intended project in the space provided.

SECTION B. CLIENT (MUNICIPALITY) INFORMATION

Municipality Name, County, Municipality Type. Enter the name of the client municipality and the name of the county in which the municipality is located. Check the appropriate block indicating the municipality type, whether **City, Boro, or Township (Twp)**.

Municipality Contact Individual Last Name, First Name, MI, Suffix, Title. Enter the requested information for the client contact in this block. The municipal client contact is often the municipal secretary, but may be another official, such as the chairman of the board of supervisors. Please indicate the appropriate title of the client contact in the Title block.

Alternative Individual Last Name, First Name, MI, Suffix, Title (optional). This is an optional block to be used by municipalities that wish to provide an alternate client contact. Enter the requested information only if an alternate contact name is desired.

Mailing Address. This is the mailing address of the client municipality identified above. It should not include locational data that is not appropriate for a standard mail address. In addition to the street number and name, PO Box number, RR number, Box number, or Highway Contract number designations, use any appropriate designation and number to further define the mailing address. Use these standard abbreviations:

e.g., APT (Apartment) FLR (Floor)
 BLDG (Building) RM (Room)
 DEPT (Department) STE (Suite)

City, State, ZIP+4, Phone Information. Do *not* use abbreviations for the city name. Use the two-character abbreviation for the state. Include the four-digit extension to the ZIP code, if known.

SECTION C. SITE INFORMATION

DEP needs to be able to accurately locate your site and to understand the physical nature of the surrounding area. Therefore, the application must be accompanied by a 7.5 minute topographic map published by the US Geological Survey or a clear copy that includes the quadrangle name. These maps can usually be obtained from most map distributors or hunting and fishing supply stores. On the topographic map, draw the outline of the development site.

Site Name. The name of the site at the specific physical location. This should be similar to the project name in A.1. **DO NOT** use abbreviations, acronyms, etc.

Site Location. Provide the physical address of the location where the permitted activities will occur. **DO NOT** use PO Box numbers for site location information. Provide the city (or municipality), state, and the ZIP+4, if known.

Detailed Written Directions to Site. When providing written directions, **DO NOT** use PO Box address data. Include landmarks and approximate distances from the nearest highway.

Description of Site. Provide a written description of the proposed project.

Site Contact (Developer/Owner) Information. Provide the name of the person having overall responsibility for environmental matters at the site. This person is often the landowner or the landowner's agent. Include the individual's name, title, firm, email address (optional), mailing address, and daytime phone numbers. This individual will ultimately be responsible for paying the DEP review fee.

SECTION D. PROJECT CONSULTANT INFORMATION

If this form was completed by someone other than the applicant, such as a consultant, engineer or contractor, that individual should complete this section of the form.

SECTION E. AVAILABILITY OF DRINKING WATER SUPPLY

Indicate the intended source of the project's drinking water by checking the appropriate box. If a public water supply will be used, provide written documentation that the water supplier is aware of the project, possesses capacity to serve the project and is willing to serve the project. A public water supply is defined as a system that provides water to the public for human consumption that could serve 15 or more connections, or serve 25 or more people daily at least 60 days out of the year.

SECTION F. PROJECT NARRATIVE

The following information is required to be provided in narrative (paragraph) form and attached to the module package. Title the attachment "Project Narrative".

1. Indicate the nature of the development project. (*Residential, Commercial, Institutional, Industrial, etc.*) If the project is commercial, institutional or industrial, describe the activity, such as light manufacturing, private hospital, or heavy manufacturing.
2. Enter the number of lots or EDUs in the development project. Lots refer to single family residential dwellings and for purposes of flow calculation are assumed to generate a minimum of 400 gallons per day (gpd). If larger residential flows are anticipated, these flows should be used. The residual tract, if any, is also counted as a lot. For commercial, industrial, and institutional facilities, the number of lots in a subdivision is determined by using EDUs. Divide the total flow for these facilities by 400 to determine the number of EDUs.
3. Describe the proposed sewage disposal method (municipal treatment facility, package plant, etc.) including a description of collection and conveyance facilities, if applicable. Include a general map showing the path of the sewage to the treatment facility.
4. Specify the projected population to be served and sewage flows in gpd and how these figures were calculated. Flow figures should be consistent with those found in DEP's *Domestic Wastewater Facilities Manual* available on the DEP Web site at www.depweb.state.pa.us. Keyword: "wastewater" unless adequate justification for lower per capita flows is provided and/or has been previously approved by DEP.
5. Describe the location of the discharge, disposal point or land application, if applicable.
6. List the total acreage of the proposed land development project.
7. Describe the use of any acreage or parcels under the same ownership and adjacent to the property. (Such as: for future development, recreational, agriculture, open space, etc.) If the land is proposed for future development, or is part of a phased project, determine if there will be adequate sewage disposal facilities to serve those phases.
8. Provide information on any previous Act 537 planning completed for the site and any other information that the applicant believes is important for the Department's review of the project.

SECTION G. PROPOSED WASTEWATER DISPOSAL FACILITIES

This section requires the applicant to provide information on collection, conveyance and treatment facilities proposed for the development project.

1. Collection System

To complete this section, check the appropriate box to indicate if the collection system is a new system, an extension to an existing system or a tap-in to an existing system. For each of these cases, indicate the number of EDU's or tap-ins that will be served by the collection system and the name of the collection or conveyance system and the interceptor to be used. A sewer **EXTENSION** is defined as the construction of a sewage collection system to serve more than one tap-in. Sewer lines that cross property lines are also sewer extensions. A **TAP-IN** is defined as a connection to an existing sewage collection system.

2. Wastewater Treatment Facility

The second part of the section requires information on the treatment facility. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed* (Form 3800-FM-WSFR0353-1) for additional information on Chesapeake bay watershed requirements.

- a. Indicate by checking the appropriate box whether the facility is new construction or if it is an existing facility. If the facility requires upgrading or expansion to serve the development, the appropriate box should be checked. New construction includes any proposal that will require the issuance of a Clean Streams Law permit. For existing facilities, provide the name and NPDES permit number of the facility. Contact the facility for that information.
- b. Indicate that all applicable technology and water quality standards will be achieved following this project by completing the required information and obtaining the permittee's authorized representative's signature on the confirmation statement.

3. Plot Plan

Submit a plot plan of the proposed subdivision that contains the information listed below. The scale of the plot plan should be sufficient to show the development and adjacent areas and allow the municipality and approving agency to easily identify the required information. The plot plan must be prepared by a registered surveyor prior to submittal to the approving agency. Some of the information required can be found in the municipality's Official Plan. Other information can be found in tax maps, zoning maps, soil maps, Federal Emergency Management Agency (FEMA) floodplain maps, wetland maps and on-site surveys.

- a. Existing and proposed buildings. All buildings on the tract and adjacent lots (including properties across streets) must be plotted.
- b. Lot lines of individual lots and size of lots in the proposed development.
- c. Adjacent lots.
- d. Remainder of tract. Any property that is not included in the plan but is under the same ownership and is adjacent must be plotted.
- e. Existing sewage facilities on adjacent lots and proposed sewage facilities to serve the development project. (location of collection lines, pump stations, etc.). These areas may be identified by use of a legend. Actual locations of tap-ins, sewer extensions, force mains, or pump stations that will be utilized by the project should be identified.
- f. The point of connection to the existing collection system. All proposed collection lines must be shown to the point of connection to the existing system.
- g. Existing and proposed water supplies (wells, reservoirs, etc.) and surface water (ponds, detention facilities, lakes, streams) on the adjacent land and proposed development.
- h. Existing and proposed rights-of-way. Proof of legal recording of rights-of-way may be required when the right-of-way is necessary to implement the sewage facilities alternative.
- i. Existing and proposed buildings, streets, roads, access roads, highways, etc.
- j. Open space areas designated within the proposed development and any parks, state forests or other state land adjacent to the development.
- k. Wetland areas. DEP is required to protect the wetlands of the Commonwealth from unnecessary destruction. Show any wetland areas on the plot plan as they are identified by hydric soils in USDA Natural Resources Conservation Service maps and by National Wetland Inventory mapping. If there is disagreement with the mapping, or wetlands are present and they are not shown in the mapping, plot the results of actual in-field delineation of the wetlands on the plan. Use the delineation process required by Title 25 of the Pennsylvania Code, Chapter 105, §105.451, Identification and Delineation of Wetlands-Statement of Policy.

If wetlands are present, the applicant may be required to obtain permits for any construction activities such as encroachments (fill, roads, utility lines) or obstructions (bridges, walls, piers) in, along, or across the wetlands. Contact the DEP regional office for further information.

Full delineation may be required as a condition of permit issuance, including issuance of onlot system permits, Clean Streams Law permits, or encroachment or obstruction permits for construction activities in, along, or across wetlands. The plot plan must distinguish between in-field delineations and transcribed mapping from existing sources.

- i. Flood Plains. These areas should be plotted on the plan as they are indicated in Federal Emergency Management Agency Flood Plain mapping or USDA Natural Resources Conservation Service mapping.
- m. Prime agricultural land listed by the USDA Natural Resources Conservation Service as "Pennsylvania Prime Farmland Soils", or soils listed as Capability Classification I, II or III in the USDA Natural Resources Conservation Service Soil Survey.
- n. Existing onlot or sewerage systems, pipelines, transmission lines, etc. Show any facilities currently in use or abandoned.
- o. Orientation to north, usually shown by a directional arrow.
- p. Show the locations of any sites where tests were performed in accordance with Sections K, L, M and/or N (if applicable). All soil profile test pit evaluations and slope measurements should be recorded on "Site Investigation and Percolation Test Report" forms (3800-FM-WSFR0290A, formerly known as "Appendix A").
- q. Show soil types and boundaries when a land based system is proposed.
- r. Show topographic lines with elevation when a land based system is proposed.

4. Wetland Protection

- a. DEP is required to protect the wetlands of the Commonwealth from unnecessary destruction. The applicant is required to answer "yes" or "no" to the question of whether there are any wetlands in the project area. If yes, show these areas on the plot plan as they are identified by hydric soils in USDA Natural Resources Conservation Service maps or by National Wetlands Inventory mapping. If there is disagreement with the mapping, or if wetlands are present and are not shown on the mapping, plot the results of actual in-field identification of the wetlands on the plan. Use the identification process required by Title 25 PA Code Chapter 105, §105.451, Identification and Delineation of Wetlands - Statement of Policy.
- b. If wetlands are present, indicate with a yes or no answer if the project is proposing any construction activities such as encroachments (fill, roads, utilities) or obstructions (bridges, walls, piers) in, along or across the wetlands. If any of these are proposed, please contact the DEP regional office for further information. Full delineation may be required as a condition of permit issuance, including issuance of Clean Streams Law permits, encroachment or obstruction permits for construction activities in, along, or across wetlands. The plot plan must distinguish between in-field delineations and transcribed mapping from existing sources.

5. Prime Agricultural Land Protection

Indicate whether the project involves the disturbance of prime agricultural lands. If the project will result in the disturbance of these lands, it must be consistent with policies and procedures established for protection of prime agricultural lands by the municipality. The project sponsor and local officials must rectify land use problems prior to submission of the sewage facilities planning module package to DEP for review.

6. Historic Preservation Act

Coordination with the Pennsylvania Historic and Museum Commission (PHMC) is necessary for proposals meeting conditions specified in DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code*. Specific documentation required to be submitted with this planning module package is found in the Technical Guidance, available online available on line in the eLibrary at DEP's website address at www.depweb.state.pa.us. As a minimum this includes copies of the completed Cultural Resources Notice (CRN), a return receipt for its submission to the PHMC and the PHMC review letter.

7. Protection of Rare, Threatened or Endangered Species

DEP's technical guidance document "Policy for Pennsylvania Natural Diversity Inventory (PNDI) Coordination During Permit Review and Evaluation," (400-0200-001) requires DEP to ensure that requests for authorizations, are coordinated with the Department of Conservation and Natural Resource's (DCNR) Pennsylvania Natural Diversity Inventory (PNDI).

Conducting a search of the PNDI database and providing a copy of a "PNDI Project Environmental Review Receipt" for the proposed project and, if potential impacts are identified by the search, any clearance or recommendation letters from the jurisdictional agency responsible for the particular species identified by a search, satisfies this requirement.

To avoid project delay, self explanatory, self conducted "PNDI Project Planning Environmental Review" searches are initiated at www.naturalheritage.state.pa.us. This interactive, online search will ask questions about the proposed project and provide the appropriate receipt, instructions or additional information regarding coordination with jurisdictional agencies.

As an alternative to the self conducted search, project sponsors may request DEP staff to conduct the search by providing a completed "PNDI Project Planning & Environmental Review Form" (PNDI Form). The form is available at www.naturalheritage.state.pa.us. Individuals making this request should be aware that, due to the nature of the search software, DEP staff may need to contact them for additional information to successfully complete the search and that exclusive of any other items, their sewage planning module submission is considered incomplete by DEP, until the appropriate receipt, clearance or recommendation letters are received.

For more information, see to the "Policy for Pennsylvania Natural Diversity Inventory (PNDI) Coordination During Permit Review and Evaluation," (400-0200-001), available on line in the eLibrary at DEP's website address www.depweb.state.pa.us.

SECTION H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS

This section is used to document that the proposed sewage disposal method is appropriate for the project both over the short-term (5 years) and long-term (beyond 5 years). Local government officials should be consulted in completing this analysis. The analysis consists of a narrative that describes land uses, sewage disposal methods, sewage management programs and a comparison of existing methods of sewage disposal in the area with the proposed method of sewage disposal. The analysis is used by the municipality and approving agency to determine if the chosen disposal method will have an impact on future municipal sewer service to these areas, and whether other potential methods of sewage disposal could better serve the sewage facilities needs of the area as a whole. Attach the narrative to the planning module and title it "Alternatives Analysis".

To complete the analysis, include the information listed below.

1. Describe the chosen disposal method, its location, the daily flow proposed and if the method is an interim method (to be replaced by the ultimate method in 5 years or less), or is an ultimate method (to serve the development in the long term, for 5 years or more). Provide a description of how the chosen method will provide compliance with effluent limitations. Also provide the number of lots or EDU's that will be served.
2. Describe the types of land uses adjacent to the project area (Agricultural, Residential, Commercial etc.) and the type of sewage disposal method serving each of those land uses.

Properties adjacent to the project must be described by indicating present land uses and zoning designations. Describe the sewage disposal methods being used for each of those adjacent land uses (onlot, municipal treatment, etc.) and if those methods are intended for interim or ultimate use.

3. Indicate if the sewage facilities described in (2) are in need of improvement due to noncompliance with effluent limitations, high rates of onlot malfunction or overloaded public sewers. Is there a potential for a combined public/private project?

If any of the sewage facilities described above are in need of improvement in order to attain or maintain compliance with effluent limitations (including Nitrogen and Phosphorus cap loads, where appropriate), overloaded treatment facilities or high onlot malfunction rates, a combined sewage disposal alternative that proposes to upgrade or construct facilities to serve these needs areas as well as the proposed project area may be more viable than a method intended to serve only the current project.

4. Determine and indicate what sewage disposal method is proposed for the development area in the municipality's Official Sewage Facilities Plan (such as: onlot disposal systems, public sewers, etc.).
5. Describe any existing sewage management program(s) in the area, and/or any sewage management program(s) that this project would be required to participate in, and that program's requirements.

When the alternatives analysis includes the potential construction of DEP-permitted non-municipal sewage treatment facilities, the municipality is required to implement a sewage management program that must include one of the management options outlined in Title 25, Pennsylvania Code, §71.72 (available at www.pacode.com). These options range from financial assurances to municipal ownership of the facility. The applicant should describe which option will be proposed, how it will be implemented, and why it was chosen over the other methods outlined in §71.72. Details of the chosen option must be included.

Any new or expanded point source discharges which are proposed in the Chesapeake Bay watershed, must not add to amount of nutrients discharging to the Bay waters. This is known as a nutrient cap load. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed* (Form 3800-FM-WSFR0353-1) for additional information on Chesapeake Bay watershed requirements. Maintaining the cap load for new sources can be accomplished through such methods as land application of effluent, recycle and reuse, acquiring offsets for loads from replacement, reduction or retirement of existing sources, or the purchasing of credits elsewhere (trading). Your alternatives selection proposal must clearly demonstrate that this requirement has been met.

6. Describe any potential alternative sewage disposal methods that are available for the project. Consider all reasonable possibilities for sewage disposal, such as a stream discharge or an alternate method of land disposal. The municipality, delegated local agency or DEP may also require consideration of particular types of sewage disposal methods in the analysis. The chosen method must assure that applicable water quality standards are attained.
7. Describe why the proposed method was chosen over any of the other methods described in the alternatives analysis. Environmental, administrative, and financial concerns may be addressed. Also indicate how the chosen method will guarantee adequate sewage disposal, including compliance with applicable water quality standards and effluent limitations, for the development in both the short-term (up to 5 years) and long-term (beyond 5 years) by describing the adequacy of the proposed facilities (organic and hydraulic loading) and the ability of the facility to accept additional flows or loads.
8. Indicate who will be the owner of the facility, and who will be responsible for operation and maintenance of the facility and ultimately compliance with applicable water quality standards and effluent limitations.

To assure adequate long-term sewage disposal for the project, the disposal system must be properly operated and maintained. The applicant must indicate in the analysis who will be the owner of the facility and who will be responsible for the operation and maintenance of the facility. This may be a private individual, a municipality, a sewer authority or a management agency; however, the ultimate responsibility lies with the municipality. The delegated local agency or DEP may require a more extensive analysis of the available choices relative to ownership and operation of the facility. If the project will be required to participate in an **EXISTING** municipal sewage management program, or if a sewage management program is to be created, describe the program's requirements. Sewage management programs can consist of requirements for tank pumping, ordinances requiring maintenance of systems, or financial arrangements (fees, taxes, etc.) guaranteeing long-term operation of the treatment facilities.

9. Finally, the applicant may use the narrative to describe any special considerations or provide any additional information that supports the choice of disposal method. The alternatives analysis must be attached to the planning module package for review by the municipality and approving agency.

SECTION I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS

The selected sewage disposal alternative identified through evaluation under Section H. above must comply with applicable water quality standards, effluent limitations established to meet those standards and other technical requirements. Documentation must be submitted with the Planning Module that shows that, in addition to statewide water quality standards, the selected method of sewage treatment and disposal also complies with any applicable water quality standards or treatment requirements for the following waters: (Check and complete all that apply.)

1. Waters Designated for Special Protection

Title 25, Pennsylvania Code, Section 93.4c. of the DEP regulations requires that sewage facilities proposing to discharge or increase an existing discharge into High Quality Waterways complete a Social or Economic Justification (SEJ) and publish a public notice as part of the sewage facilities planning process. Please refer to specific requirements that may be found in Section 93.4c(c), available online at www.pacode.com or from your local DEP office. Additional information is available as Technical Guidance 391-0300-002 also available online at www.depweb.state.pa.us.

2. Pennsylvania Waters Designated as Impaired

Under Title 25, Pennsylvania Code, Section 96.4 of the DEP regulations, DEP has identified surface waters or portions thereof that are impaired, and thus require TMDL development under Section 303(d) of the federal Clean Water Act. Water quality based effluent limitations for discharges to these waters may be more stringent than those applicable to meet statewide water quality standards. Applicants should review their proposal and the DEP list of impaired waters, which can be found online at www.depweb.state.pa.us under 'Mapping' and 'eMap'. Select the 'Streams Integrated List' layer. Applicants, municipalities or authorities proposing new or increased sewage discharges to impaired waters should contact the appropriate DEP regional office to schedule a pre-planning meeting prior to proceeding with their project.

3. Interstate and International Waters

Title 25, Pennsylvania Code, Section 93.9(b) of the DEP regulations provides for exceptions to statewide water quality standards where interstate commissions, international commissions or downstream states have adopted different water quality regulations or standards. Applicants, municipalities or authorities proposing new or increased sewage discharges to interstate or international waters have the option to contact the appropriate DEP regional office to schedule a pre-planning meeting prior to proceeding with their project.

4. Tributaries to the Chesapeake Bay

Title 25, Pennsylvania Code, 92.2(b)(14) incorporates by reference federal regulations under the Clean Water Act, which require that NPDES permits meet all water quality standards, including those of downstream states. In addition, 25 Pa. Code 92.73(5) specifically precludes the issuance, modification, renewal or reissuance of an NPDES permit "when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states."

Maryland amended its water quality standards in August, 2005, as part of a multi-jurisdictional effort to address impairment of the Chesapeake Bay from nutrients and sediment. In accordance with the federal Clean Water Act and Pennsylvania regulations, Maryland's changes result in the need for nutrient reductions in Pennsylvania to comply with the new standards.

DEP has developed a plan to meet these requirements. First, in anticipation of the new water quality standards, DEP issued its Chesapeake Bay Tributary Strategy (CBTS) in July, 2004. This Strategy includes special allocations for nutrient discharges that apply to new and expanding sewage discharges within the Susquehanna and Potomac drainage basins in Pennsylvania. Documentation of compliance with these allocations must be submitted with planning modules proposing new or expanding discharges in these drainage basins. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed* (Form 3800-FM-WSFR0353-1) for additional information on Chesapeake Bay watershed requirements. Applicants, municipalities or authorities proposing new or expanding sewage discharges to these waters should contact the appropriate DEP regional office for special instructions on completing Component 3, and to schedule a pre-planning meeting prior to proceeding with their project. More information on Pennsylvania's strategy for achieving the nutrient reductions can be found on the DEP Web site at www.depweb.state.pa.us, Keyword: "Chesapeake Bay" or for the special instructions use keyword "Wastewater" and select "Act 537 Sewage Facilities Electronic Forms."

SECTION J. CHAPTER 94 (MUNICIPAL WASTELOAD MANAGEMENT) CONSISTENCY

(Complete if box is marked in component)

Owners of municipal sewage systems are required to prepare annual Wasteload Management reports in accordance with Title 25 of the Pennsylvania Code, Chapter 94. The reports provide detailed information on collection, conveyance and treatment system flows and organic loads relative to available capacity. Loads and flows are projected 5 years into the future based on planned development. If the system or any part of the system shows or projects an overload, a **corrective action plan (CAP)** to address the need is developed. Overloaded systems result in prohibitions and bans on additional connections. It is important that the applicant know how the project will impact or change the wasteload management of the system to which his/her project will connect.

To complete this section:

1. List the anticipated project flows in gallons per day (gpd).
2. When providing "treatment facility" sewage flows, use Annual Average Daily Flow for "Average" and Maximum Monthly Average Daily Flow for "Peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).
 - a. Provide the design maximum monthly average and peak flows for proposed facilities, or the permitted average and peak capacity for existing facilities that will serve the project. This information can be obtained from the system designer or facility permittee.
 - b. Provide the present maximum monthly average flows and peak flows in gallons per day for the critical (most hydraulically restricted) sections of existing facilities. The facility permittee can provide this information.
 - c. Provide the projected maximum monthly average and peak flows in five years (two years for pump stations) through the critical sections of existing facilities. Include existing, proposed and future projects. In this fashion, consideration is given to present flow, flows from other approved projects, allocated capacity, and the proposed project flows. This information can be obtained from the facility's Chapter 94 report. If the project will affect more than one municipality or authority, please provide this information for each.

The values entered in the table for existing facilities should represent flows through those areas of the sewage pathway that are most restricted in hydraulic carrying capacity. Contact the facility permittee or the individual responsible for preparing the Chapter 94 report for this information. If information is not available from these sources, a physical inspection of the facilities may be required. Based on this inspection, carrying capacity may be calculated using slope and diameter of the collection or conveyance system and the size of such facilities as pump stations and treatment facilities. If flow information on critical sections cannot be determined based on calculations, flow measurements may be conducted for a representative period of time (to include both wet and dry weather conditions) for a minimum of seven days. This information must then be used to determine the flow through these sections. Proposed facilities must use design values to complete the table for design and projected flows. **COLLECTION** refers to pipelines and conduits. **CONVEYANCE**

refers to pump stations and force mains, interceptors, trunk sewers, or any other appurtenant facility used for conveying sewage to a plant. TREATMENT refers to the sewage treatment plant to be used.

3. & 4. The person responsible for preparing the Chapter 94 report for each of the collection, conveyance and treatment systems that are planned for use must sign the form. In most cases, the Chapter 94 report preparer is an employee or representative of the treatment facility permittee. Contact the owner or permittee of each facility to determine if this is the case for your project. The signoff will indicate that there is adequate capacity available for the project's sewage disposal needs as required in § 71.53(d)(3), and that the additional load will not negatively impact the Chapter 94 status of the facility, taking into account projected loads and any previously allocated capacity. If the project will negatively impact the Chapter 94 status of the facility, the project cannot be approved. In some cases, DEP has approved a CAP for the allocation of connections to systems where flow or loading problems exist. Where CAPs are in effect, the project may be approved based on these allocations. If this is the case, the Chapter 94 report preparer should attach a letter that grants these allocations to the project. In some cases, municipalities have an approved list of projects for the allocation of connections; in other instances, a municipality has a general allocation. The letter should indicate if the allocation is from an approved list or is part of a general allocation.

SECTION K. TREATMENT AND DISPOSAL OPTIONS

(Complete if marked in component or if the project will propose a discharge of treated effluent)

Four options are available for the disposal of treated sewage effluent: (1) spray irrigation or other land application, (2) recycle and reuse, (3) discharge to an intermittent or ephemeral stream, or (4) discharge to a perennial surface water body. Each of the four options has technical requirements that must be met before the planning module can be approved. The following paragraphs describe the type of information that must be included for each of the four discharge alternatives. Select all appropriate treatment and disposal options being proposed, indicate the selection by checking the corresponding checkbox in Section K and attach all necessary documentation to support the selection(s). Note that where technically feasible land application and reuse alternatives are preferable to discharge alternatives.

1. Spray Irrigation or other Land Application

The Department's technical guidance, "Manual For Land Treatment of Wastewater" DEP ID: 362-2000-009 (available in the eLibrary on the DEP Website at www.depweb.state.pa.us), and the EPA documents "Guidelines for Water Reuse" (EPA/625/R-92/004) and "Land Treatment of Municipal Wastewater" (EPA/625/1-81-013), provide the necessary instructions for proposals. The planning elements as outlined in those documents should be included with the Component 3.

2. Recycle and Reuse

The Department's technical guidance, "Reuse of Treated Wastewater Guidance Manual" DEP ID: 362-0300-009 (available in the eLibrary on the DEP Web site at www.depweb.state.pa.us), and the EPA documents "Guidelines for Water Reuse" (EPA/625/R-92/004) and "Land Treatment of Municipal Wastewater" (EPA/625/1-81-013), provide the necessary instructions for proposals. The planning elements as outlined in those documents should be included with the Component 3.

3. Discharge to Intermittent or Ephemeral Stream, Drainage Channel, Swales, or Storm Sewer

The Department's technical Guidance, "Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers" DEP ID: 391-2000-014 (available in the eLibrary on the DEP website at www.depweb.state.pa.us), provides the necessary instructions for proposals involving a discharge to intermittent or ephemeral streams, drainage channels, swales, or storm sewers. The planning elements as outlined in that document should be included with the Component 3. If the proposed discharge flow extends to point of first use (POFU) Section I above must be addressed.

4. Discharge Perennial Stream (Surface Water)

If a discharge to perennial surface waters is proposed, Section I above MUST be addressed. In addition:

- a. On a 7.5' USGS topographic map, show the property lines of the development and the point of discharge to the stream. Label the stream name. If the discharge is to an unnamed tributary of a stream, label the first-named body of water on the map.

- b. Specify the quality and rate at which sewage effluent will be discharged to the stream. DEP will evaluate the stream flow and current quality of the stream to determine if the level of treatment proposed is sufficient, or if additional treatment is needed. Seasonal variations in the discharge flows should also be discussed if they are proposed.
- c. Contact the appropriate regional office regarding determination of preliminary effluent limits. Evaluate the treatment facilities and alternatives for meeting effluent limitations and water quality standards.

SECTIONS L, M, N. PERMEABILITY AND HYDROGEOLOGY

(Complete if marked in component or appropriate for the project)

In certain situations, permeability testing and hydrogeology studies must be completed for the proposed development. These sections should be completed if marked. Sections M and/or N should be completed and sealed by a registered professional geologist familiar with the requirements of these sections. This person should contact the DEP Regional Hydrogeologist for further guidance.

SECTION L. PERMEABILITY TESTING

(Complete if marked in component or if the conditions in number 1 (below) apply)

1. Completion of this section may be required when any of the following exist:
 - a. An onlot system with a total absorption area greater than 5,000 square feet will be used.
 - b. DEP has determined that the soil, underlying parent material, geology at the site, or volume of the discharge may cause adverse groundwater mounding or inadequate sewage treatment.
2. The following information is to be submitted:
 - a. Description of the soils and geology at the site and the characteristics of these which may limit the horizontal or vertical movement of sewage.
 - b. Description, location and results of any permeability testing performed, including:
 - (1) Identification and description of restrictive layers of soil, parent material and bedrock.
 - (2) Rate of flow through and laterally over those restrictive layers (in inches per hour).
 - (3) Calculation of potential groundwater mounding expected from the additional flows.
 - c. Recommendations on system design modifications needed because of poor permeability, including absorption area sizing or placement and dosing rates for onlot overland flow.

Note: DEP may require more detailed hydrogeologic information based on the information submitted in this section.

SECTION M. PRELIMINARY HYDROGEOLOGIC STUDY

(Complete if marked in component or if the condition from number 1 (below) apply)

Hydrogeologic work requires an appropriate professional signature and seal.

1. This section must be completed when soil-dependent treatment methods are proposed and any of the following apply:
 - a. A large volume system (a system designed for flows greater than 10,000 gpd) will be used.
 - b. A subdivision of more than 50 EDUs with a density of more than one EDU per acre is proposed.
 - c. DEP has determined that water supplies within ¼ mile of the proposed development site exceed 5 parts per million (ppm) nitrate-nitrogen (NO₃-N).
 - d. DEP has determined that known geological conditions at the proposed site may contribute to the potential for groundwater pollution from such systems.

2. The following information is to be submitted on a copy of the topographic map of the area and in narrative form:
 - a. Results of background sampling for total coliform, fecal coliform, pH, and nitrate-nitrogen.
 - b. If as a part of a Preliminary Hydrogeologic Study a well is drilled to assess the background nitrate-nitrogen concentrations in the shallow groundwater, the hydrogeologist shall provide a log of the well or wells. The log or logs shall provide the date of drilling, total well depth, depth to bedrock, depth to bottom of casing, depth to all water bearing zones, and the static water level. The well logs do not need to be graphical. In addition, the report should contain a discussion of the well purging protocol used prior to well sampling. The protocol must assure that a fresh sample is obtained from the shallow aquifer.
 - c. Topographic location of the proposed system(s).
 - d. Estimated area of impacted groundwater (dispersion plume and mixing zone within the dispersion plume) calculated from the surface topography and known geologic conditions.
 - e. Identification of existing and potential groundwater uses within the dispersion plume.

Note: Based on the information submitted in this section, DEP may require more detailed hydrogeologic information (Section N, below).

SECTION N. DETAILED HYDROGEOLOGIC STUDY

(Complete if marked in component or if DEP determines during the planning proves that the additional study is necessary)

Hydrogeologic work requires an appropriate professional signature and seal. A detailed hydrogeologic study must be completed when the proposed system(s) may degrade groundwater or surface water to the point that existing or potential groundwater uses or designated stream uses may not be protected. Often specific tasks listed in the detailed hydrogeologic study will satisfy DEP concerns. Since the level of study necessary for a particular site may vary, it is recommended the DEP regional hydrogeologist be contacted to determine the level of study necessary for a project.

A. Content of Detailed Hydrogeologic Study

The following information must be included in the detailed hydrogeologic study using narrative and/or maps as appropriate.

1. Type of discharge to groundwater. This includes:
 - a. Dry stream channel
 - (1) Intermittent stream (dry under low flow conditions)
 - (2) Stormwater drainage ditch (flow in wet season or during and immediately after storms)
 - b. Onlot subsurface disposal
 - (1) Individual onlot systems
 - (2) Community onlot systems
 - (3) Large Volume onlot systems
 - c. Land Application
 - (1) Spray irrigation
 - (2) Unlined wetland cell
 - (3) Groundwater infiltration
2. Plot the topographic location of the discharge.
3. The relationship between surface water and groundwater flow.
4. Investigate, describe and plot geologic and hydrogeologic characteristics influencing groundwater flow. These characteristics include but are not limited to the following:
 - a. Bedrock formations, lithologic description and range of depth

Instructions

- b. Bedding features, the frequency and direction of dominant joints and fractures
 - c. Faults, lineaments and earth fracture traces
 - d. Karst features such as open and closed sinkholes, closed depressions, known solution channels, pinnacles or other specific features
 - e. Unconsolidated material characteristics (soil, glacial materials, fluvial materials, etc.)
 - f. Unconsolidated bedrock characteristics (saprolite, weathered zones)
 - g. Elevation of the permanent groundwater table, anticipated water table fluctuation and groundwater flow direction
 - h. Unconfined or confined aquifer characteristics
 - i. Aquifer flow characteristics as quantified through pump testing or other characterization methodology (i.e., hydraulic conductivity, storage coefficient, transmissivity, etc.)
 - j. Existing, planned and potential down-gradient groundwater uses including, but not limited to: all water supply locations; the volume of water used at these locations; the estimated horizontal extent of each well's cone of depression; and the influence of pumping upon the natural groundwater gradient, the direction of flow and including both existing and potential water supplies.
5. Groundwater/surface water characteristics, including:
- a. If as part of a Detailed Hydrogeologic Study a well is drilled to assess the background nitrate-nitrogen concentrations in the shallow groundwater, the hydrogeologist shall provide a log of the well or wells. The log or logs shall provide the date of drilling, total well depth, depth to bedrock, depth to bottom of casing, depth to all water bearing zones, and the static water level. The well logs do not need to be graphical. In addition, the report should contain a discussion of the well purging protocol used prior to well sampling. The protocol must assure that a fresh sample is obtained from the shallow aquifer.
 - b. Existing groundwater quality and quantity, including, but not limited to, the following analyses:

1) Total coliform	10) Total manganese
2) Fecal coliform	11) Sodium
3) pH	12) Magnesium
4) Total iron	13) Calcium
5) Turbidity	14) Potassium
6) Alkalinity	15) Sulfate
7) Nitrate-Nitrogen	16) Total Dissolved Solids
8) Chloride	17) Hardness
9) Ammonia-Nitrogen	18) Volatile Organic Compounds
 - c. The name, location, flow characteristics, flow volume (cfs), existing water quality and designated use of any potentially impacted surface water (receiving stream). Include all surface water uses as listed for the water body in Chapter 93.
 - d. Influence of surface water runoff and groundwater recharge on groundwater characteristics.
 - e. Designation of any watershed area that is utilized for a water supply, recreation, or agricultural irrigation.
 - f. Any other information necessary to adequately analyze the hydrogeologic impact by the proposed facility.

B. Detailed Hydrogeological Study Analysis and Report

Using the information gathered, describe and analyze the proposed facility's impact. Use narrative and mapping where appropriate. A complete study should include, but not be limited to, the following items:

1. Discuss pre-treatment system components proposed to decrease effluent contaminant levels prior to groundwater discharge. Include design and testing data submitted to support any long-term, consistent, reliable, and measurable treatment claims.
2. Delineate any dispersion plume in which the existing water quality will be degraded. Include all identified contaminant and hydrogeological variables from the site in this analysis.
3. Describe any natural condition and/or artificial control that confines dispersion plume flow.
4. Delineate a mixing zone within the dispersion plume where any chemical or biological concentrations will exceed rates in Federal Drinking Water Quality Standards.
5. Identify a buffer zone for the dispersion plume and mixing zone and also discuss the effects of seasonal weather conditions on this zone.
6. Discuss impacts on existing, planned and potential groundwater uses in the delineated dispersion plume, mixing zone and buffer zone.
7. Discuss any surface water bodies that may intercept, or interact with the dispersion plume.
8. Predict and quantify any impacts the identified dispersion plume will have upon the uses listed for that surface water body.
9. Predict any effects of the dispersion plume on all existing, planned or future groundwater uses.
10. Predict the extent and height of any groundwater/wastewater mound resulting from restrictive layers in the subsurface. Restrictive layers may include, but are not limited to restrictive soil horizons, unconsolidated geological materials, weathered bedrock materials, low permeability bedrock, or a permanent groundwater table.
11. Discuss any physical, chemical or biological impact to groundwater, surface water or treatment facility function resulting from the formation of a groundwater/wastewater mound. Soil is often part of the treatment process and for analysis purposes may be considered part of the treatment facility.
12. Discuss and propose any system change or recommendations deemed necessary to mitigate the effects of the identified groundwater/wastewater mounding.
13. Discuss any groundwater monitoring program necessary to guard against adverse impacts from the facility. The program should include proposed monitoring well locations, appropriate groundwater sampling methodologies, appropriate chemical and biological sampling parameters, and appropriate monitoring frequencies. If appropriate, include monitoring considerations to protect existing surface water uses.
14. Discuss authority for controlling groundwater uses within the mixing and buffer zones. Such items as, groundwater easements and access rights that are necessary for mitigation or abatement purposes, should be discussed.
15. Discuss contingency plan to abate pollution if groundwater monitoring reveals a problem.

SECTION O. SEWAGE MANAGEMENT

This section is to be completed by the developer, representatives of the non-municipal treatment facilities and the municipality.

1. & 2. (Developer) List the anticipated project flows in gallons per day (gpd).
3. (Developer) Each permittee is responsible for assuring that concentration and load based discharge limits are not exceeded. This requires that the permittee and local government properly manage connections, properly operate and maintain treatment facilities and establish assurances for the continuing operation and maintenance of the facilities. Assurances take many forms. When a proposal includes the use of nutrient credits or offsets to achieve zero net increase in nutrient loads, the proposal must describe the methods to ensure that the credits and/or offsets will be available for the duration of the project. These assurances must be clearly described in the documentation for this section and appropriate letters of intent between the parties attached.
4. & 5. (Non-municipal Facility Agent) The person responsible for the collection, conveyance, and treatment system (normally the facility permittee) planned for use must answer the questions and sign the form. Attach the analysis

necessary to properly answer the capacity questions. Evaluate the various options available to the municipality to assure long-term proper operation and maintenance of the proposed non-municipal facilities.

6. (Municipality) DEP permitted non-municipal sewage facilities and community onlot sewage systems permitted by a local agency require long-term operation and maintenance to keep them working correctly and to prevent public health hazards or pollution caused by a discharge of inadequately treated sewage effluent. When these systems fail due to lack of adequate operation or maintenance, DEP holds both the property owner and the municipal government responsible to either repair or replace the improperly functioning system. The municipality should protect itself from potential future liabilities associated with improperly operated or maintained sewage disposal systems by assuring that guarantees of long-term operation and maintenance are properly evaluated and in place before use of the facility is approved.

DEP regulations, § 71.72 requires that all planning modules proposing non-municipal and community onlot systems include an evaluation of the options available to assure long-term proper operation and maintenance of the proposed facilities. Prior to adoption of the planning module the municipality shall require one or more or a combination of the following:

1. A bond or escrow account sufficient to cover the costs of future operation and maintenance of the sewage facilities under local ordinances. Bonding, escrow or other security shall be forfeited to the municipality upon notice by DEP of continuing noncompliance of the system with the operation and maintenance standards established through a condition in the permit issued by DEP or the local agency. (For additional details on this option refer directly to §71.72(a)(1)).
2. A maintenance agreement between the property owner and an individual, firm or corporation experienced in the operation and maintenance of sewage treatment systems.
3. A maintenance agreement between the property owner and municipality or its designated local agency which establishes the property owner's responsibility for operating and maintaining the system and the responsibility of the municipality or local agency for oversight of the system.
4. A municipal ordinance which requires the system to be operated and maintained through a maintenance agreement between the property owner and an individual, firm or corporation experienced in the operation and maintenance of sewage treatment systems.
5. Establishment of a properly chartered association, trust or other private entity which is structured to manage the system.
 - a. **ASSOCIATIONS** must meet the following minimum requirements to be considered adequate:
 - (1) The association must be nonprofit and incorporated or must be a co-op under the Public Utility Commission's jurisdiction.
 - (2) Articles of Incorporation and Bylaws must:
 - (a) limit the purpose of the association and stipulate that funds collected for sewerage services be disbursed only in payment for expenses of these systems.
 - (b) provide for membership and voting rights for each owner of an improved property in the development.
 - (c) provide for suspension of service to property owners for non-payment of bills.
 - (d) stipulate that the corporation owns the sewerage facilities.

- (e) establish the capability of the association to:
 - keep records and an accounting/auditing system
 - collect fees for services provided
 - disburse funds
 - contract with public or private agencies for labor or other services
 - employ personnel to operate and maintain sewage facilities
 - establish contingency funds for use in repairing system components
 - have elected officer and bylaws.
 - (f) establish association membership as a deed restriction and condition of sale of the property.
 - (g) establish the legal right to enter upon property for routine inspections or maintenance and to respond to emergencies.
 - (h) establish assurance that adequate operation and maintenance funds are available from the start of the sewerage system operation.
- b. Properly chartered TRUSTS must meet the following minimum requirements to be considered adequate:
- (1) The sewage facilities are legally conveyed to a third party (trustee) through a trust deed.
 - (2) The trust deed contains specific provisions which require the original owner of the facilities to:
 - (a) Maintain the sewage system in accordance with normally accepted operation and maintenance standards and permit conditions at all times.
 - (b) Provide continued service to each property connected to the sewage facilities.
 - (c) Provide service at a rate established in the trust deed or by action or regulation of the Public Utilities Commission.
 - (3) The Trust Deed states that upon the original owner's default on any of the Trust Deed provisions, the Trustee named has the authority and responsibility to take possession, operate and manage the sewage facilities.
6. Municipal ownership of the system.
7. Establishment of, or inclusion of, the system under a management agency through existing municipal codes, including but not limited to municipal authorities, sanitary boards and boards of health.
8. Establishment of, or inclusion of, the system under a management agency through the adoption of local ordinances under municipal codes.

SECTION P. PUBLIC NOTIFICATION REQUIREMENTS

If publication is required under Section 71.53(d)(6), the published notice must contain certain facts about the project in a newspaper of general circulation within the municipality affected to provide a chance for the general public to comment on proposed new land development projects. The applicant or the applicant's agent, the municipality or the local agency, may provide this notice. Where an applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent shall notify the municipality or local agency and that municipality or local agency will be relieved of the obligation to publish.

Contents of Publication Notice. The following items must be contained in the notice:

- 1. Name of project.

2. Type of development (residential, multi-residential, commercial, industrial).
3. Location, including road and street markers, municipality and county.
4. Acreage under development and number of equivalent dwelling units proposed.
5. Type of sewage disposal proposed (individual, community or large volume onlot, holding tanks).
6. Reason why publication was necessary.
7. Establishment of a 30 day comment and review period.
8. Where and when the Sewage Facilities Planning Module can be seen for comment and review (preferably, the municipal office).
9. Address of municipal office where comments will be accepted.

All comments, the municipal responses to comments, and proof of publication shall be submitted with the Sewage Facilities Planning Module package. If no comments were received, attach a copy of the public notice and check the appropriate box in Section P.

SECTION Q. FALSE SWEARING STATEMENT

The final requirement of the component requires the person who has completed the component to provide the requested information and acknowledge the false swearing statement by signing and dating the form.

SECTION R. REVIEW FEES

The Sewage Facilities Act establishes a fee for the DEP planning module review. DEP will calculate the review fee for the project and invoice the project sponsor OR the project sponsor may attach a self-calculated fee payment to the planning module prior to submission of the planning package to DEP. (Since the fee and fee collection procedures may vary if a "delegated local agency" is conducting the review, the project sponsor should contact the "delegated local agency" to determine these details.) After consideration of the options available, please check the appropriate box in the Component 3 form attached.

Planning module review fees for a Component 3 submission may be determined using the following formulae:

1. For a new collection system (with or without a Clean Streams Law Permit), a collection system extension, or individual tap-ins to an existing collection system use this formula.

$$\# \text{ _____ Lots (or EDUs) X } \$50.00 = \$ \text{ _____}$$

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.

2. For a surface and subsurface discharge system use the appropriate one of these formulae.

- A. A new surface discharge greater than 2000 gpd will use a flat fee:
\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

- B. An increase in an existing surface discharge will use:
_____ Lots (or EDUs) X \$35.00 = \$ _____
to a maximum of \$ 1,500 per submittal (non-municipal) or \$ 500 per submittal (municipal)

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.
- For non-single family residential projects, EDUs are calculated using projected population figures

- C. A sub-surface discharge system that requires a permit under the Clean Streams Law will use a flat fee:
 - \$ 1,500 per submittal (non-municipal)
 - \$ 500 per submittal (municipal)

OTHER REQUIREMENTS

Planning Agency Review

Component 4 *Planning Agency Review* form (3800-FM-WSFR0362 A, B, & C) and a copy of the entire planning module package must be forwarded by the applicant to each existing municipal, county or areawide planning agency, and any existing county or joint county health department for their comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the package to the agencies will provide proof of receipt. These agencies are required to provide comments within 60 days of receipt of the module package. The planning agencies will review the package for consistency with municipal and county official sewage facilities plans, municipal comprehensive plans, zoning, and land use designations. They will also determine consistency of the plan with wetland protection, storm water management, archaeological and historical resources, and prime agricultural land protection as indicated in the comprehensive plan for the area. Proof that the package has been in front of these agencies for 60 days without comment will satisfy the review requirement. When the agencies return the package to the applicant, or if 60 days have passed without comment, the package may be submitted to the municipality for their action.

Municipal Review

1. For **REVISIONS** to the Official Plan (Approving agency: DEP)

The municipality must determine if the planning module package is complete within 10 days of its receipt. If it is complete, the municipality must sign and date the checklist following this guidance to document the date of receipt of a complete module package. Incomplete packages are to be returned to the applicant for completion.

The municipality must act upon a complete Component 3 planning module package within 60 days of receipt or within such additional time as the applicant and municipality may agree to in writing. Failure of the municipality to act within 60 days or within the agreed time extension will cause the planning module to be deemed approved by the municipality. The complete planning module, along with the signed and dated completeness checklist, may then be sent to DEP by the municipality or applicant for final review and approval.

Municipal actions can include adoption of the planning module as a revision to the municipality's Official Plan, adoption of the revision with modifications, or denial of the revision. If the plan is adopted, the municipality forwards the revision, along with the signed and sealed Resolution for Plan Revision form and signed Transmittal Letter form, to DEP. Denied revisions are to be returned to the applicant with the reason(s) for denial. DEP must also be informed of the reasons for denial of the revision.

2. For **SUPPLEMENTS** to the Official Plan (Approving agency: delegated local agency)

The municipality must determine if the planning module package is complete within 10 days of its receipt. If it is complete, the municipality must sign and date the checklist following this guidance to document the date of receipt of a complete module package. Incomplete packages are to be returned to the applicant for completion.

The municipality must act upon a complete Component 3 planning module package within 60 days of receipt or within such additional time as the applicant and municipality may agree to in writing.

Municipal actions include approval of the planning module as a supplement to the municipality's Official Plan, approval of the supplement with modifications, or denial of the planning module as a supplement to the Official Plan. If the supplement is approved, the municipality sends it to the delegated local agency serving the municipality for final review. If the supplement is denied, it is returned to the applicant with the reason(s) for denial. The delegated local agency and DEP must also be informed of the reasons for denial.

Approving Agency (DEP or Delegated Local Agency) Review

1. For **REVISIONS** to the Official Plan (Approving agency: DEP)

DEP must determine if the planning module is complete within 10 days of receipt. If it is complete, DEP will do a technical review of the revision. DEP must approve or disapprove the planning module revision within 120 days of receipt, unless the planning module is for a residential subdivision plan, which requires DEP action within 60 days of

receipt of a complete submission. If DEP fails to act within this 120 day period (60 days for residential subdivision plans), the planning module is deemed to be approved, unless DEP informs the municipality before the end of the review period that an extension of time is necessary to complete the plan review. This time extension may not exceed 60 days.

The municipality and applicant will receive a letter informing them of DEP action. If the plan is disapproved, the municipality and applicant will also be notified of the reason(s) for the disapproval.

2. For SUPPLEMENTS to the Official Plan (Approving agency: Delegated local agency)

The delegated local agency must determine if a proposed plan supplement is complete within 10 days of receipt. If it is complete, the delegated local agency must approve or disapprove the proposed plan supplement within 60 days or within an additional time that the applicant and delegated local agency agree to in writing. No additional approval by DEP is required unless the plan supplement proposes service by sewerage facilities requiring a new or modified permit from DEP under the Clean Streams Law. In this case, the plan supplement must be forwarded to the DEP for final action.

Completeness Checklist

The individual completing the component should use the checklist below to assure that all items are included in the module package. The municipality should confirm that the required items have been included within 10 days of receipt, and if complete, sign and date the checklist.

Sewage Collection and Treatment Facilities

- Name and Address of land development project.
- U.S.G.S. 7.5 minute topographic map with development area plotted.
- Project Narrative.
- Letter from water company (if applicable).
- Alternative Analysis Narrative.
- Details of chosen financial assurance method.
- Proof of Public Notification (if applicable).
- Name of existing collection and conveyance facilities.
- Name and NPDES number of existing treatment facility to serve proposed development.
- Plot plan of project with required information.
- Total sewage flows to facilities table.
- Signature of existing collection and/or conveyance Chapter 94 report preparer.
- Signature of existing treatment facility Chapter 94 report preparer.
- Letter granting allocation to project (if applicable).
- Signature acknowledging False Swearing Statement.
- Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- Information on selected treatment and disposal option.
- Permeability information (if applicable).
- Preliminary hydrogeology (if applicable).
- Detailed hydrogeology (if applicable).

Municipal Action

- Component 3 (Sewage Collection and Treatment Facilities).
- Component 4 (Planning Agency Comments and Responses).
- Proof of Public Notification.
- Long-term operation and maintenance option selection.
- Comments, and responses to comments generated by public notification.
- Transmittal Letter

Signature of Municipal Official

Date submittal determined complete



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

Code No.

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

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

This planning module component is used to fulfill the planning requirements of Act 537 for the following types of projects: (1) a subdivision to be served by sewage collection, conveyance or treatment facilities, (2) a tap-in to an existing collection system with flows on a lot of 2 EDU's or more, or (3) the construction of, or modification to, wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. Planning for any project that will require DEP to issue or modify a permit cannot be processed by a delegated agency. Delegated agencies must send their projects to DEP for final planning approval.

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

REVIEW FEES: Amendments to the Sewage Facilities Act established fees to be paid by the developer for review of planning modules for land development. These fees may vary depending on the approving agency for the project (DEP or delegated local agency). Please see section R and the instructions for more information on these fees.

NOTE: All projects must complete Sections A through I, and Sections O through R. Complete Sections J, K, L, M and/or N if applicable or marked .

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name

2. Brief Project Description

B. CLIENT (MUNICIPALITY) INFORMATION (See Section B of instructions)

Municipality Name	County	City	Boro	Twp
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1	Mailing Address Line 2			
Address Last Line -- City	State	ZIP+4		
Phone + Ext.	FAX (optional)	Email (optional)		

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Site Location Line 1

Site Location Line 2

Site Location Last Line – City

State

ZIP+4

Latitude

Longitude

Detailed Written Directions to Site

Description of Site

Site Contact (Developer/Owner)

Last Name

First Name

MI

Suffix

Phone

Ext.

Site Contact Title

Site Contact Firm (if none, leave blank)

FAX

Email

Mailing Address Line 1

Mailing Address Line 2

Mailing Address Last Line – City

State

ZIP+4

D. PROJECT CONSULTANT INFORMATION (See Section D of instructions)

Last Name

First Name

MI

Suffix

Title

Consulting Firm Name

Mailing Address Line 1

Mailing Address Line 2

Address Last Line – City

State

ZIP+4

Country

Email

Phone

Ext.

FAX

E. AVAILABILITY OF DRINKING WATER SUPPLY

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

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

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

Name of water company: _____

F. PROJECT NARRATIVE (See Section F of instructions)

- A narrative has been prepared as described in Section F of the instructions and is attached.

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

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment requirements).

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

- New collection system Pump Station Force Main
- Grinder pump(s) Extension to existing collection system Expansion of existing facility

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's _____

Connections _____

Name of:

existing collection or conveyance system _____

owner _____

existing interceptor _____

owner _____

2. WASTEWATER TREATMENT FACILITY

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 (relating to water quality standards).

a. Check appropriate box and provide requested information concerning the treatment facility

- New facility Existing facility Upgrade of existing facility Expansion of existing facility

Name of existing facility _____

NPDES Permit Number for existing facility _____

Clean Streams Law Permit Number _____

Location of discharge point for a new facility. Latitude _____ Longitude _____

b. The following certification statement must be completed and signed by the wastewater treatment facility permittee or their representative.

As an authorized representative of the permittee, I confirm that the _____
(Name from above) sewage treatment facilities can accept sewage flows from this project without adversely affecting the facility's ability to achieve all applicable technology and water quality based effluent limits (see Section I) and conditions contained in the NPDES permit identified above.

Name of Permittee Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

The following information is to be submitted on a plot plan of the proposed subdivision.

- a. Existing and proposed buildings.
- b. Lot lines and lot sizes.
- c. Adjacent lots.
- d. Remainder of tract.
- e. Existing and proposed sewerage facilities. Plot location of discharge point, land application field, spray field, COLDS, or LVCOLDS if a new facility is proposed.
- f. Show tap-in or extension to the point of connection to existing collection system (if applicable).
- g. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.)
- h. Existing and proposed rights-of-way.
- i. Existing and proposed buildings, streets, roadways, access roads, etc.
- j. Any designated recreational or open space area.
- k. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.
- l. Flood plains or Flood prone areas, floodways, (Federal Flood Insurance Mapping)
- m. Prime Agricultural Land.
- n. Any other facilities (pipelines, power lines, etc.)
- o. Orientation to north.
- p. Locations of all site testing activities (soil profile test pits, slope measurements, permeability test sites, background sampling, etc. (if applicable).
- q. Soils types and boundaries when a land based system is proposed.
- r. Topographic lines with elevations when a land based system is proposed

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

- Will the project involve the disturbance of prime agricultural lands?
If yes, coordinate with local officials to resolve any conflicts with the local prime agricultural land protection program. The project must be consistent with such municipal programs before the sewage facilities planning module package may be submitted to DEP.
If no, prime agricultural land protection is not a factor to this project.
- Have prime agricultural land protection issues been settled?

6. HISTORIC PRESERVATION ACT

YES NO

- Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP Web site at www.depweb.state.pa.us , select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice (CRN), a return receipt for its submission to the PHMC and the PHMC review letter.

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

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

Applicant or Consultant Initials _____

H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)

- An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.
The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See Section I of instructions) (Check and complete all that apply.)

1. Waters designated for Special Protection

- The proposed project will result in a new or increased discharge into special protection waters as identified in Title 25, Pennsylvania Code, Chapter 93. The Social or Economic Justification (SEJ) required by Section 93.4c. is attached.

2. Pennsylvania Waters Designated As Impaired

- The proposed project will result in a new or increased discharge of a pollutant into waters that DEP has identified as being impaired by that pollutant. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss water quality based discharge limitations.

3. Interstate and International Waters

- The proposed project will result in a new or increased discharge into interstate or international waters. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss effluent limitations necessary to meet the requirements of the interstate or international compact.

4. Tributaries To The Chesapeake Bay

- The proposed project result in a new or increased discharge of sewage into a tributary to the Chesapeake Bay. This proposal for a new sewage treatment facility or new flows to an existing facility includes total nitrogen and total phosphorus in the following amounts: _____ pounds of TN per year, and _____ pounds of TP per year. Based on the process design and effluent limits, the total nitrogen treatment capacity of the wastewater treatment facility is _____ pounds per year and the total phosphorus capacity is _____ pounds per year as determined by the wastewater treatment facility permittee. The permittee has determined that the additional TN and TP to be contributed by this project (as modified by credits and/or offsets to be provided) will not cause the discharge to exceed the annual total mass limits for these parameters. Documentation of compliance with nutrient allocations is attached.

Name of Permittee Agency, Authority, Municipality _____

Initials of Responsible Agent (See Section G 2.b) _____

See *Special Instructions* (Form 3800-FM-WSFR0353-1) for additional information on Chesapeake Bay watershed requirements.

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows _____ gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §1.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (Continued)

c. Conveyance System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

Yes No

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

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

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

- 1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
- 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
- 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
- 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

N. DETAILED HYDROGEOLOGIC STUDY (See Section N of instructions)

The detailed hydrogeologic information required in Section N. of the instructions is attached.

O. SEWAGE MANAGEMENT (See Section O of instructions)

(1-3 for completion by the developer(project sponser), 4-5 for completion by the non-municipal facility agent and 6 for completion by the municipality)

Yes No

1. Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

If Yes, respond to the following questions, attach the supporting analysis, and an evaluation of the options available to assure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the remainder of Section O.

2. Project Flows _____ gpd

Yes No

3. Is the use of nutrient credits or offsets a part of this project?

If yes, attach a letter of intent to purchase the necessary credits and describe the assurance that these credits and offsets will be available for the remaining design life of the non-municipal sewage facility;

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

The questions below are to be answered by the organization/individual responsible for the non-municipal collection and conveyance facilities. The individual(s) signing below must be legally authorized to make representation for the organization.

Yes No

a. If this project proposes sewer extensions or tap-ins, will these actions create a hydraulic overload on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, a representative of the organization responsible for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with Chapter 71 §71.53(d)(3) and that this proposal will not affect that status.

b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

The questions below are to be answered by a representative of the facility permittee. The individual signing below must be legally authorized to make representation for the organization.

Yes No

- a. If this project proposes the use of an existing non-municipal wastewater treatment plant for the disposal of sewage, will this action create a hydraulic or organic overload at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with §71.53(d)(3) and that this proposal will not impact that status.

- b. Name of Facility _____
 Name of Responsible Agent _____
 Agent Signature _____
 Date _____

(For completion by the municipality)

6. The **SELECTED OPTION** necessary to assure long-term proper operation and maintenance of the proposed non-municipal facilities is clearly identified with documentation attached in the planning module package.

P. PUBLIC NOTIFICATION REQUIREMENT (See Section P of instructions)

This section must be completed to determine if the applicant will be required to publish facts about the project in a newspaper of general circulation to provide a chance for the general public to comment on proposed new land development projects. This notice may be provided by the applicant or the applicant's agent, the municipality or the local agency by publication in a newspaper of general circulation within the municipality affected. Where an applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent shall notify the municipality or local agency and the municipality and local agency will be relieved of the obligation to publish. The required content of the publication notice is found in Section P of the instructions.

To complete this section, each of the following questions must be answered with a "yes" or "no". Newspaper publication is required if any of the following are answered "yes".

Yes No

1. Does the project propose the construction of a sewage treatment facility ?
2. Will the project change the flow at an existing sewage treatment facility by more than 50,000 gallons per day?
3. Will the project result in a public expenditure for the sewage facilities portion of the project in excess of \$100,000?
4. Will the project lead to a major modification of the existing municipal administrative organizations within the municipal government?
5. Will the project require the establishment of *new* municipal administrative organizations within the municipal government?
6. Will the project result in a subdivision of 50 lots or more? (onlot sewage disposal only)

P. PUBLIC NOTIFICATION REQUIREMENT cont'd. (See Section P of instructions)

- 7. Does the project involve a major change in established growth projections?
- 8. Does the project involve a different land use pattern than that established in the municipality's Official Sewage Plan?
- 9. Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
- 10. Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
- 11. Will sewage facilities discharge into high quality or exceptional value waters?
- Attached is a copy of:
 - the public notice,
 - all comments received as a result of the notice,
 - the municipal response to these comments.
- No comments were received. A copy of the public notice is attached.

Q. FALSE SWEARING STATEMENT (See Section Q of instructions)

I verify that the statements made in this component are true and correct to the best of my knowledge, information and belief. I understand that false statements in this component are made subject to the penalties of 18 PA C.S.A. §4904 relating to unsworn falsification to authorities.

Name (Print)	Signature
Title	Date
Address	Telephone Number

R. REVIEW FEE (See Section R of instructions)

The Sewage Facilities Act establishes a fee for the DEP planning module review. DEP will calculate the review fee for the project and invoice the project sponsor **OR** the project sponsor may attach a self-calculated fee payment to the planning module prior to submission of the planning package to DEP. (Since the fee and fee collection procedures may vary if a "delegated local agency" is conducting the review, the project sponsor should contact the "delegated local agency" to determine these details.) Check the appropriate box.

- I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.
- I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of \$_____ payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.
- I request to be exempt from the DEP planning module review fee because this planning module creates **only one** new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania

Deed Volume _____ Book Number _____

Page Number _____ Date Recorded _____

R. REVIEW FEE (continued)

Formula:

1. For a new collection system (with or without a Clean Streams Law Permit), a collection system extension, or individual tap-ins to an existing collection system use this formula.

$$\# \underline{\hspace{2cm}} \text{ Lots (or EDUs) X } \$50.00 = \$ \underline{\hspace{2cm}}$$

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
 - For community sewer system projects, one EDU is equal to a sewage flow of 400 gallons per day.
2. For a surface or subsurface discharge system, use the appropriate one of these formulae.

- A. A new surface discharge greater than 2000 gpd will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

- B. An increase in an existing surface discharge will use:

$$\# \underline{\hspace{2cm}} \text{ Lots (or EDUs) X } \$35.00 = \$ \underline{\hspace{2cm}}$$

to a maximum of \$ 1,500 per submittal (non-municipal) or \$ 500 per submittal (municipal)

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
 - For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.
 - For non-single family residential projects, EDUs are calculated using projected population figures
- C. A sub-surface discharge system that requires a permit under The Clean Streams Law will use a flat fee:
- \$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

White Paper
Capital Improvements

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

Capital Improvement

If some type of facilities will need to be constructed for the point of connection sewershed the following issues need to be considered:

- Who will take the lead in administrating the project?
- Will it be one entity or two?
- Bidding:
 - Considerations will need to be coordinated between Borough, Township, home role, etc.
- Do any of the municipalities have pre-qualification regulations?
- Who will design and oversee bidding of the project?
- Who will obtain, if necessary, any permits?
- Who will perform the Construction Administration and inspection?
- How will the all costs be shared?
- What design standards will be adhered to?
 - Municipal specifications?
 - The Allegheny County Plumbing should be considered
 - Standard Engineering Practices
 - 3RWW Working Papers
- How will change orders be resolved?
- How will payment be processed?
- Who will hold the final bonds?
- What construction standards would be used?
- How will the project be financed?

White Paper
Cost Sharing & Billing

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

COST SHARING AND BILLING WHITE PAPER

Primary Author: Lawrence J Lennon, P.E. D. WRE

This document has been prepared by the primary author and reviewed by a committee of engineers and managers representing the Borough of Bridgeville, the Municipality of Mt. Lebanon, and the Townships of Scott and Upper St. Clair under a grant received from 3 Rivers Wet Weather.

This White Paper addresses two related topics within the context of an ISA:

1. Cost sharing, and
2. Billing.

OVERVIEW

Cost sharing is defined as a *"Multiparty arrangement under which costs of a program or project are shared by the involved parties, according to an agreed upon formula."* (BusinessDictionary.com)

Perhaps the most important element of an Intermunicipal Service Agreement (ISA) is cost sharing methodologies. More time and effort will likely be expended discussing and negotiating the cost sharing aspect of an ISA than any other aspect of the agreement. As time passes, assuming environmental compliance is achieved, no other element is likely to receive as much attention as cost sharing. To be effective and to stand the test of time, cost sharing must be equitable; it must encourage proper, in many cases enhanced, operation and maintenance (O&M) to minimize the operating cost of shared facilities and to facilitate regulatory compliance; and it must be transparent.

As currently envisioned, there are up to four "levels" of cost sharing (e.g., "fees") anticipated within Allegheny County related to implementation of the Wet Weather Plan being developed:

- a. ALCOSAN (transport and treatment),
- b. Pittsburgh Water and Sewer Authority (PWSA) or other downstream municipal transport fees,
- c. Local municipal shared facilities fees,
- d. Internal municipal collection system fees.

This White Paper addresses only item c. Local municipal shared facilities fees.

Elements of Cost

The primary elements of cost to be addressed in an ISA are as follows:

- a. Initial costs,
- b. Tap-in costs,
- c. Annual O&M costs,
- d. Annual debt service costs,
- e. Compliance penalty costs, and
- f. Future capital improvements.

The cost, and resultant fees, to be distributed include both one-time charges and annually recurrent elements. Examples of one-time fees are Tap-In fees and compliance penalties. The former are locally established and are usually predefined yet adjustable. However, the latter are usually the result of some action or lack of action and can be both unpredictable and expensive. The annually recurrent costs include both fixed and variable components. Annual debt service payments, administrative billing, insurances, and so forth are examples of annually fixed costs. Variable costs include labor, power, chemicals, and third-party maintenance required to operate the shared facilities.

Initial Costs

Within the context of the Allegheny County Wet Weather Plan, the initial cost elements would consist of items such as the following:

- Capital expenditures on existing shared facilities not otherwise distributed,
- Engineering
 - Feasibility study efforts including modeling, alternative analysis, and preliminary site planning, and
 - Design phase services for the shared facilities.

Depending upon the scope of the shared facilities construction work, these costs could run into many thousands of dollars. If the cost is "fronted" by the downstream municipality, the cost could be reimbursed entirely by rolling this cost into the final borrowing. (This may be limited, depending upon the source of capital funding.) Alternatively, partial proportional reimbursement of the initial costs could be implemented to minimize capital borrowing costs.

Tap-In Fees

Tap-In fees are considered a charge that reflects capital costs levied against a property proposing to connect to a system that has been in operation and for which capital costs have been previously incurred. The Tap-In fee is considered a payment "not funded" by user costs to reflect new user "buy-in" to an existing system. Allowable

fees and methods of computation are regulated by Pennsylvania Act 57. It has become very common for Tap-In fees to be passed on from downstream service providers to upstream users. Shared wet weather facilities are an obvious component that would be subject to the levying and collection of Tap-In fees.

An area for evaluation and consideration is whether a Tap-In fee for shared facilities will be levied against both "new" users and redevelopment uses.

In terms of Act 57 identified components, the Special Purpose Part appears most appropriate for shared facilities.

The following provides an overview summary of Act 57:

Act 57 Fee Components:

- I. **Connection Fee Component** – Recoverable costs for connection from main line to curb stop or site tee (typically within ROW). Act 57 permits use of replacement cost option, using average cost to construct, trended forward using published cost indices.
- II. **Customer Facilities Fee Component** – Recoverable costs for connection from the curb stop or site tee to the building being served (typically outside of the right-of-way).
- III. **Tapping Fee Component** (Based on system equity, not just replacement costs):
 - i. **Capacity Part** – Cost of capacity related facilities (interceptors, treatment plants, storage, pumping facilities, source of supply, etc.).
 1. Act 57 allows capacity-related future facilities fees (this does not apply to the Distribution/Collection Part or the Special Purpose Part) under the following conditions:
 - a. Increase the system design capacity
 - b. Maintain a separate accounting system
 - c. Have taken two of the following actions:
 - i. Obtained financing
 - ii. Entered into a contract
 - iii. Obtained a permit
 - iv. Obtained property
 - v. Contracted to acquire new facilities
 - vi. Prepared an engineering study
 - vii. Contracted for the design or construction (including in-house design/construction)
 - ii. **Distribution or Collection Part** – The cost of the required facilities to provide service (mains, hydrants, pumping stations, etc.).
 - iii. **Special Purpose Part** – Applies to a special "group" of customers (e.g., a "low-pressure" service area that requires a waterline booster station specific for their use).
 - iv. **Reimbursement Part** – Reimbursement to the developer in accordance with Section 31 of the Municipal Authorities Act (Section 31 is unmodified as a result of Act 57). Reimbursement is mandatory within a 10-year period if new

users (e.g., single adjacent houses/service lines) connect to a developer-constructed extension. If a second development connects to the same developer-constructed extension, then this Reimbursement Part can be modified by a Developer's Agreement.¹

Annual O&M Costs

Operation and maintenance costs for shared facilities include all direct and indirect costs of day-to-day operation and maintenance of the facilities, such as labor, utilities (power, water, etc.), equipment, vehicle fleet, administration, and third-party contract services. As noted, this element of cost will be annually variable based on a number of factors, including the type of facility, and on internal system factors such as flows and pollutant loads into the facility (in the case of treatment). Simple conveyance facilities should exhibit reasonably definable levels of effort and costs associated with routine cleaning and closed-circuit televising (CCTV). Equalization basins and combined sewer overflow (CSO) treatment facilities will exhibit costs directly associated with the quantity of excess flow and pollutant load generated by the system.

Most operating budgets are prospective, which can present a bit of a challenge in the initial years of operation because there is no "track record" on which to rely. Annual variability will also occur even where there is a track record. For this reason, it may be advisable to include some sort of annual contingency allowance or pre-funded "rainy day" fund or contingency to cover unforeseen expenses that may arise.

Annual Debt Service Costs

This element of cost addresses repayment of capital borrowing utilized to fund construction-related capital costs. The annual payment amount is often established by the borrowing documents in the amortization schedule at the outset of a project. As such, payments are subject to a defined annual payment schedule based on the term and interest rate of a borrowing.

Compliance Penalty Costs

Of the elements of cost described herein, compliance penalties is the one that is at one and the same time the most unpredictable but also the most avoidable. Compliance penalty costs are incurred only when there is a violation of a regulatory document (i.e., a permit or order), willfully or otherwise. Penalties are usually tied directly to a defined incident or a series of incidents; however, the cause of the incident or incidents may not be clear. With shared facilities, the difficulty will be in assigning responsibility for any such violations.

Future Capital Improvements

This element addresses the cost of constructing new capital facilities that may be required as a result of new regulatory requirements, the need to expand to

¹ LSSE internal memo, July 2004.

accommodate land use changes or growth, or simply deterioration of the constructed facilities.

COST SHARING: CONCEPTS AND METHODOLOGIES

Initial Costs, Annual O&M, Debt Service, and Future Capital Improvement Costs

For an ISA to be successful, the cost sharing methodology selected must be both consistent and equitable. It is important to specifically define the terms of billing, as well as who pays for the costs of O&M, capital improvements, administration, and so forth.

A key aspect of this discussion is both the establishment of the initial shares (i.e., capital costs plus costs incurred during the first year of operation) and the determination of how future shares will be both apportioned and validated. Generally speaking, management looks for a stable and predictable budget. However, owing to the potential for significant cost overruns associated with excess flows in certain instances, it may be appropriate to provide for cost sharing/budget adjustment after the final actual costs are known. This might be accomplished through the use of a surcharge for excess flow above an allocated amount. The surcharge could be applied seasonally or annually.

Part of the evaluation of cost sharing concepts includes a determination as to whether the cost sharing will be static or dynamic in terms of response to change. A static cost sharing agreement is one that remains unchanged in terms of cost shares, regardless of any changes in the actual cost and the elements that affect that cost. A dynamic agreement will attempt to adjust the cost shares based on some measurable element of change in the cost basis. In this regard, a Cost of Services Studies (COSS) concept can be employed. COSS breaks down operating costs into discrete elements that are unitized based on some measurable parameter. For example, administrative billing costs could be unitized based on the number of bills sent out to derive a cost per bill unit. Labor, power, and chemical costs could be unitized based on flow rate and so forth.

A number of methods of cost sharing are considered in wastewater agreements. These methodologies may be based on the following:

- “Agreed upon” basis
- Capacity basis
- Water consumption
- Measured wastewater flow (“pay to play”)
 - Area velocity (AV) monitors
 - Primary element based meters
- Equivalent Dwelling Units (EDUs)
- Hydrologic and hydraulic (H&H) model
- Ratio basis
 - Peak Wet Weather Flow/Dry Weather Flow (PWWF/DWF)

- Wet day/dry day
- Strength of flow

“Agreed Upon” Basis

As the phrase implies, this cost sharing approach could be as simple as each party agreeing to a fixed share of each element of cost or all costs across the board. Negotiation of the basis of the percent share is left to the whim and imagination of the involved parties. Shares could be fixed for the term of the agreement, or they could be adjustable on some schedule or any other basis.

Capacity Basis

Capacity based cost sharing is predicated on the design capacity of the shared facilities and the portion that is allocable to the various parties to the Agreement. For the types of facilities being evaluated for separate systems, wet weather flow rate and volume are the primary capacity parameters. The Design Engineer’s Report to be submitted as part of the construction permitting (PaDEP Part II Permit) should clearly specify and set forth the flow rate and volumetric design basis, as well as the capacity needs associated with all municipal entities. This information can serve as the basis for pro rata distribution of cost elements such as debt service and initial costs. One issue that should be addressed is how and whether unused and/or excess capacity utilized by “others” will be subject to cost reimbursement.

Water Consumption

The water consumption based sharing method is a volumetric based, pro rata, share method. Under this method, an annual billing rate (e.g., \$/1,000 gallons) is computed based upon budgeted total annual operating cost divided by the total annual volume of water consumed (in 1,000 gallons) by all connected users. This rate is applied to the actual billed volume, resulting in a dollar invoice amount. This cost share method is currently utilized for the ALCOSAN “Z” Agreement billing, whereby each “Z” Agreement municipality receives an invoice based on total water consumption within the municipality for each billing period. The local water company (e.g., PWSA, Pennsylvania American) provides metered water consumption data to ALCOSAN for computation of the rate as well as for billing. ALCOSAN in turn computes the bill (i.e., share) for each municipality based on total water consumed by the respective municipality’s customers for the billing period. This method provides the appearance of equity as the water consumed in most cases is equal to the sewage flow within a sewer system. However, because the shared facilities are typically sized based on wet weather flow, which has no relationship to water consumption, the method does not necessarily reflect the origin of either flow or incurred cost.

Measured Wastewater Flow (“Pay to Play”)

This methodology is very similar to the water consumption based method, with the primary difference being that actual wastewater flow volume is substituted for water

consumption data. Implementation of a wastewater flow metered based cost sharing system, while the most equitable basis of cost sharing, is also the most difficult and costly to maintain. Flow metering/monitoring can be problematic and requires the supervision of an experienced engineer for installation, calibration, and verification over time.

As the phrase implies, flow metering/monitoring based methods require direct flow measurement of the sources contributory to the facilities. As part of this discussion, it is very important to understand the difference between metering and monitoring because there is a substantial difference in both accuracy and precision. Metering is accomplished by permanent primary element based measuring devices that are usually installed in meter pits or vaults. Monitoring, which is inherently less accurate, is accomplished by area velocity (AV) probes installed directly within the sewer lines. Flow meters and flow monitors exhibit substantially different levels of reliability, accuracy, and precision, and they are subject to varying calibration and verification requirements. Precision and accuracy are of paramount importance in minimizing billing disputes.

The following is a synopsis of the current industry-accepted state of the art regarding flow monitoring/metering.

- AV Monitors – Most notable is that the “accuracy” listed in many brochures for AV technologies is stated incorrectly and/or is neither verified nor verifiable. The indicated accuracy may be achievable in ideal laboratory conditions (i.e., laminar uniform flow), but that same accuracy is not typically observed in actual field conditions. AV monitors were developed primarily to perform temporary flow studies for specific purposes and are subject to numerous sources of error. This is inherently acknowledged and is recognized by the comprehensive post-data collection quality assurance/quality control (QA/QC) data processing required in the recently completed 500+ monitor Regional Collection System Flow Monitoring Plan in the ALCOSAN system. It is widely acknowledged and accepted in the sanitary engineering industry that AV monitors are at best $\pm 15\%$ to 20% accurate. Flow mass balance has been observed to be $\pm 30\%$ for sequential monitors in ostensibly good *in situ* flow conditions. That level of error is unacceptable for billing purposes.
- Primary Element Based Meters – Primary element based devices employ accepted engineering physics that are known and that can be calibrated. Field verification is not generally required beyond initial installation in accordance with accepted engineering principles. This, of course, assumes that proper hydraulic principles have been followed in the installation of the meter. Certain open channel flow based primary element meters are limited in terms of their ability to measure and record flow under surcharge conditions.

Equivalent Dwelling Units (EDUs)

This method is somewhat similar to the water consumption method, in that costs are shared on a fixed surrogate for water consumption. The EDU based method is most often utilized for systems that do not have a public water supply system that can provide actual water use records. The standard of measure becomes the estimated volumetric water consumption of an equivalent single-family residence. Multi-family, commercial, institutional, and industrial users are all reduced to some number of EDUs, based on either measured or estimated water consumption. PaDEP Chapter 73, Section 73.17 (Appended) presents a tabulation of EDU equivalents for a number of differing uses.

Cost sharing is established in a manner similar to that for water consumption based methods, with the obvious exception that EDU counts are substituted for measured water consumption.

Hydrologic and Hydraulic (H&H) Model

The use of an H&H model, while suggested as a method of cost sharing, has not been utilized within Allegheny County or, for that matter, widely within the industry. No guidance documents have been located or identified for this method. It is presumed that a properly calibrated/verified H&H model would be required as the basis for this type of arrangement. The modeling effort alone can run into the tens of thousands, if not hundreds of thousands, of dollars and would result in a product that would require acceptance by designated technical representatives of the various parties to an agreement. See the Capacity Allocation White Paper for more discussion on the use of modeling.

Ratio Basis

- Peak Wet Weather Flow/Dry Weather Flow (PWWF/DWF)
- Wet Day/Dry Day

Strength of Flow

Strength of flow refers to the contaminant quality of the wastewater. Within the context of the ALCOSAN Wet Weather Plan, for typical conveyance and equalization basin shared facilities, wastewater strength is not a parameter of concern and should have little bearing on costs (assuming that the wastewater is not unusually contaminated). On the other hand, shared facilities which incorporate some type of wastewater treatment, strength of flow may become a parameter of concern. In this instance composite flow based sampling and water quality analysis will be needed to apportion costs.

Compliance Penalty Costs

As noted, this element of cost will be the most difficult element for which to derive a cost sharing methodology. Compliance penalties will result from some violation of permit conditions. The penalty may be nothing more than a fine, or it could be both a fine and an order to implement some sort of capital intensive fix or solution. Clearly, where the "guilty" party can be identified, the penalty should be the responsibility of that party. However, for shared facilities, given the vagaries inherent to wet weather planning and operation, it will likely be very difficult to unambiguously identify the "guilty" party. It is conceivable that one party to an agreement may be less than diligent in pursuing proper system O&M than another and could contribute to or cause a violation. Where flow metering is the basis of cost sharing, it should be possible to identify the responsible party. Where other cost sharing methodologies are utilized, in the absence of definitive flow metering data, it will be problematic to assess blame or responsibility. In these instances, where a nominal fine is involved, it may be appropriate to specify a simple legal remedy such as either mediation or arbitration. On the other hand, where a capital project is required as a direct result of an Order for permit violation, the cost may be substantial, requiring detailed investigations to assess responsibility. In this instance, it is recommended that the Agreement include the requirement for an engineering assessment by a third party to be completed that would include flow monitoring, nighttime flow isolation studies, and H&H hydraulic and hydrologic model calibration and validation to identify the source of the violation. The cost of this assessment should be paid by the parties pro rata based on one of the methods defined above.

BILLING

The cost share portion of this white paper discusses how each party's share of annual costs will be computed. Billing specifically addresses methods relative to actual cash flow (i.e., invoicing and collection). Therefore, this section of an ISA should concentrate on and set the terms of billing by the "Owner" municipality and payment by the "customer" municipality(s). Items to be addressed include the following:

- Frequency of billing,
- Basis of billing,
- Payment terms, and
- Penalties.

Frequency of Billing

The billing period selected is primarily a function of cash flow needs and, to a lesser extent, the level of effort required to gather and review the data and prepare the bills. The most common periods utilized in utility billing such as these are either monthly or quarterly. From the viewpoint of number of "customers" for which bills are rendered (typically one or two per ALCOSAN POC), short time frames on the order of a month are reasonable and feasible without substantial staffing requirements. Where wastewater flow based cost sharing is selected, correlation of the bill to actual cost

incurred, as opposed to budget based billing, becomes a significant consideration. In this instance, a combination of percentage of budgeted cost plus (or minus) a wet weather adjustment for flow above stipulated allocations may be appropriate.

Basis of Billing

Alternatives for billing method include the following:

- a. Percentage of adopted budget,
- b. Wastewater flow surrogate (e.g., EDUs),
- c. Actual metered wastewater flows, or
- d. Water consumption.

The complexity of the bills rendered may reflect the complexity of the shared facilities constructed, the allocation method, and the cost sharing basis ranging from simple Lump Sum to Unit Price, base rate plus surcharge, etc. Components of a bill for service can include the following:

- Unit Price (\$/1,000 gal)
- Base rate plus unit rate
 - Fixed debt portion plus rate for variable
- Surcharge
 - Same as base rate component, but set the allowance for wet weather and surcharge volume above

Payment Terms

This aspect of an ISA typically addresses the time allocated for payment after receipt of a bill for services. Typical terms are net 60 days. For accelerated payment, consideration may be given to the approval process and procedures of the municipal entity that receives the bill for payment.

Penalties

This aspect of an ISA typically addresses interest charges for late payment, which is usually regulated by state statute. Consideration may be given to including stipulated penalties for lack of performance. The penalties could range from cash fines to refusal to process Planning Modules.

Appendix A

Pa Code Title 25 Chapter 73

73.17. Sewage flows.

(a) The flow figures in this subsection and subsection (b) are peak daily flows for the design of community onlot sewage systems. These flow figures are not intended to be used for the calculation of flows for the design of community sewerage systems or for the allocation of flows related to community sewerage systems. Design and permit sewage flows for a community sewerage system are to be calculated using the procedures established in the Department's "Domestic Wastewater Facilities Manual." The sewage flow from single family dwellings served by a community onlot sewage system or from apartments, rooming houses, hotels and motels served by an individual or community sewage system shall be determined from the following table:

<i>Type of Establishment</i>	<i>Gallons/Unit/day</i>	
<i>Residential</i>	<i>Gallons/unit BOD/unit</i>	
Hotels and motels	100	.30
Multiple family dwellings and apartments, including townhouses, duplexes and condominiums	400	1.13
Rooming houses (per unit)	200	.60
Single family residences	400*	.90

**For units of 3 bedrooms or less; for each bedroom over 3, add 100 gallons.*

(b) The sewage flow, which shall exclude any industrial waste, for nonresidential establishments served by an individual or community sewage system shall be determined from the following table:

<i>Type of Establishment</i>	<i>Gallons/day BOD/day</i>	
<i>Commercial</i>		
Airline catering (per meal served)	3	.03
Airports (per passenger—not including food)	5	.02
Airports (per employe)	10	.06
One licensed operator Beauty shops	200	—
Bus service areas not including food (per patron and employe)	5	.02
Country clubs not including food (per patron and employe)	30	.02
Drive-in theaters (not including food—per space)	10	.06

Factories and plants exclusive of industrial wastes (per employe)	35	.08
Laundries, self-service (gallons/washer)	400	2.00
Mobile home parks, independent (per space)	400	1.00
Movie theaters (not including food, per auditorium seat)	5	.03
Offices (per employe)	10	.06
Restaurants (toilet and kitchen wastes per patron)	10	.06
(Additional for bars and cocktail lounges)	2	.02
Restaurants (kitchen and toilet wastes, single-service utensils/person)	8.5	.03
Restaurants (kitchen waste only, single-service utensils/patron)	3	.01
Stores (per public toilet)	400	2.00
Warehouses (per employe)	35	—
Work or construction camps (semipermanent) with flush toilets (per employe)	50	.17
Work or construction camps (semipermanent) without flush toilets (per employe)	35	.02
<i>Institutional</i>		
Churches (per seat)	3	—
Churches (additional kitchen waste per meal served)	3	—

Type of Establishment

<i>Institutional</i>	<i>Gallons/day BOD/day</i>	
Churches (additional with paper service per meal served)	1.5	—
Hospitals (per bed space, with laundry)	300	.20
Hospitals (per bed space, without laundry)	220	—
Institutional food service (per meal)	20	—
Institutions other than hospitals (per bed space)	125	.17
Schools, boarding (per resident)	100	.17
Schools, day (without cafeterias, gyms or showers per student and employe)	15	.04
Schools, day (with cafeterias, but no gym or showers per student and employe)	20	.08
Schools, day (with cafeterias, gym and showers per student and employe)	25	.10
<i>Recreational and Seasonal</i>		
Camps, day (no meals served)	10	.12
Camps, hunting and summer residential (night and day) with	50	.12

limited plumbing including water-carried toilet wastes (per person)

Campgrounds, with individual sewer and water hookup (per space)	100	.50
Campgrounds with water hookup only and/or central comfort station which includes water-carried toilet wastes (per space)	50	.50
Fairgrounds and parks, picnic—with bathhouses, showers, and flush toilets (per person)	15	.06
Fairgrounds and parks, picnic (toilet wastes only, per person)	5	.06
Swimming pools and bathhouses (per person)	10	.06

White Paper
Financing Options

**Chartiers Cooperative Agreement Committee
ALCOSAN POC's**

Financing Options

- I. Preliminary Research
 - A. Identify all sewer revenues currently received by municipality
 - B. Review all outstanding sewer facility financings currently on the books of the municipality
 - C. Determine if current sewer revenues are pledged to secure any outstanding sewer projects
 - D. Determine if a pledge of sewer revenues is limited or covers any future increases (whether from increased usage or rate increases) in sewer projects
 - E. Evaluate the borrowing base¹ and remaining availability for the municipality
 - F. Review statutory authority of the municipality to impose various sewer service fees, i.e., fixed fee per lot or usage
 - G. Review statutory limits, if any, for imposition of various service fees

- II. Financing Alternatives
 - A. Intergovernmental agreement concerning three-year (or five-year) capital improvement budget
 - B. Allocation of costs of capital budget to participating municipalities
 - C. Each municipality bears its pro rata cost of the multi-year capital budget from a yearly allocation set forth in its annual budget or finances its commitment to such multi-year budget

¹ As used herein, the term "Borrowing Base" means: The annual arithmetic average of the total revenues for the three full fiscal years ended next preceding the date of the incurring of nonelectoral debt or lease rental debt as set forth in a certificate stating the total revenues in each of these years and stating the average, executed by the authorized officials of the local government unit or by an independent accountant. If, within that three-year period, there has been an expansion or contracting of the territorial or functional jurisdiction of a local government unit or an authority, the borrowing base shall be calculated as if the expansion or contraction had occurred within or prior to the commencement of the three-year period in the manner as the statutes, charter provisions or court decree provide or direct or, in the absence of those provisions, as the department approves. *Source: Local Government Unit Debt Act, 53 Pa.C.S. §§ 8001 et seq.*

- D. Municipality uses its borrowing base and general obligation bonds or revenue bonds (backed by sewer revenues) to finance its share (or portion thereof) of the multi-year capital budget
 - 1. Cost differential in interest rates should be evaluated for a general obligation borrowing and a sewer revenue backed borrowing
 - 2. Cost of bond insurance for each borrowing must be included in the comparison
- E. Municipality can file with the Pennsylvania Department of Community and Economic Development ("DCED") for self-liquidating status with respect to general obligation bonds for sewer project provided sewer revenues are dedicated for repayment of the bonds and an engineering study supports the repayment of such bonds with the projected revenues stream
- F. Turn the financing and sewer revenues over to a multi-jurisdiction sewage authority

III. System Ownership and Financing Issues

- A. Resident Community and Operation/Financing
 - 1. Ownership of facilities and equipment located in a municipality are the capital assets of the host community.
 - 2. Host community enters into licensing arrangements with upstream communities for permit access to the downstream facilities and pipelines.
 - 3. Financing Construction of New System
 - (i) Execution of a limited intergovernmental agreement by all participating communities that sets forth a capital budget for the system-wide improvements required by the consent order and for the reciprocal easements and licensing to access parts of the system.
 - (a) each community applies to DCED for its share of the debt necessary to fund the construction project
 - (b) the borrowing base for non-electoral debt for each community is 250%
 - (c) the borrowing base for non-electoral debt plus lease rental debt is 350%

(d) it is possible with the aid of an engineering study to allocate sewage rates to the repayment of this debt and achieve self-liquidating debt status outside of the borrowing base.

(ii) Each community sets sewer rates and general taxes to cover its share of the debt service for this project.

B. Financing Authority or Joint Operating Authority

1. Form a municipal authority under the Municipal Authorities Act.

2. DCED approval of the issuance of debt is not required unless a municipality guarantees the debt of the municipal authority.

3. Financing will be limited by the cash flow for the authority.

(i) the financing plan will establish a capitalized interest amount for the construction permit and a debt service reserve fund

(ii) the underwriter will discount the expected cash flows and determine the size of the bond issue which will fund the construction fund, the capitalized interest fund, the debt service reserve fund and the costs of issuance

(iii) the Financing Authority will need to establish sewer rates or rents necessary to support the cash flow assumptions of the underwriter.

4. Sewer rates or rents must be set high enough to cover debt service for bond issue and to cover annual operating costs.

5. Bond documents will contain a rate covenant that will require that the Authority maintain annual revenues to cover between 105% and 120% of the combined annual debt service and projected operating costs.

6. Bond documents will likely contain a maintenance covenant which requires an annual report from an independent engineer that the system does not need any necessary repairs or improvements.

C. Intergovernmental Cooperation Agreement

1. Execution of an intergovernmental cooperation agreement by all participating communities that sets forth a capital budget for the system-wide improvements and the reciprocal easements and licensing to access parts of the system.

2. The intergovernmental agreement should address organizational issues, budgeting and management issues.
3. Each community applies to DCED for its share of the debt necessary to fund the construction project based on its percentage of the project according to the intergovernmental cooperation agreement.
4. The borrowing base for non-electoral debt for each community is 250%.
5. The borrowing base for non-electoral debt plus lease rental debt is 350%.
6. It is possible with the aid of an engineering study to allocate sewage rates for the repayment of this debt and achieve self-liquidating debt status outside of the borrowing base.
7. The process to approve annual expense payments and to set budgets is set forth in the intergovernmental cooperation agreement.

D. Environmental Improvement Compact

1. The agreement of the various municipalities creates an entity subject to the Local Government Unit Debt Act.
2. The Compact applies to DCED for its share of the debt necessary to fund the construction project.
 - (i) the borrowing base for non-electoral debt for the Compact is 250%
 - (ii) the borrowing base for non-electoral debt plus lease rental debt for the Compact is 350%
 - (iii) it is possible with the aid of an engineering study to allocate sewage rates for the repayment of this debt and achieve self-liquidating debt status outside of the borrowing base
 - (iv) the limited tax revenue available to the Compact will limit the size of permitted borrowings.

White Paper

Intermunicipal Service Agreement

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

Intermunicipal Service Agreement

- Intermunicipal service agreements are authorized by the Intergovernmental Cooperation Act, Title 53 of the Pennsylvania Consolidated Statutes, Sections 2301 et seq.
- **GENERAL RULE.--** Two or more local governments in this Commonwealth may jointly cooperate, or any local government may jointly cooperate with any similar entities located in any other state, in the exercise or in the performance of their respective governmental functions, powers or responsibilities.

JOINT AGREEMENTS.-- ...the local governments or other entities so cooperating shall enter into any joint agreements as may be deemed appropriate for those purposes. 53 Pa.C.S. § 2303.

- Any such joint or intermunicipal agreement must be adopted by ordinance enacted by each participating municipality. 53 Pa.C.S. §§ 2305, 2315.
- The ordinance adopted by the governing body of a local government entering into an intergovernmental cooperation agreement shall specify:
 - (1) The conditions of agreement;
 - (2) The duration of the term of the agreement.
 - (3) The purpose and objectives of the agreement, including the powers and scope of authority delegated in the agreement.
 - (4) The manner and extent of financing the agreement.
 - (5) The organizational structure necessary to implement the agreement.
 - (6) The manner in which real or personal property shall be acquired, managed, licensed or disposed of.
 - (7) That the entity (if any) created under this section shall be empowered to enter into contracts for policies of group insurance and employee benefits, including Social Security, for its employees.

See 53 Pa.C.S. § 2307.

- Other issues for consideration:
 - If and how another municipality may join in a joint program/service agreement (e.g., approval of all municipalities required? Buy-in costs?)
 - If and how a participating municipality can cease participation and the consequences of such action (e.g., notice requirements, return (if any) of capital contributions and source/calculation for reimbursement)
 - Voting and representation
 - Financing

General contractual issues to address:

- Indemnification
- Severability
- Forum / Dispute Resolution (Mandatory/Optional Arbitration, Mediation)
- Choice of Law
- Jointly Prepared - Not construed against any one party as drafter of the agreement

Specific items to be addressed/established in a shared facilities agreement:

- Payment of reasonable, established operating costs and fees to Owner;
- Agreement to properly regulate discharges into the system
- Pursuit and completion of any necessary internal system improvements required to maintain compliance with requirements identified in the Agreement
- Ownership of shared facilities? Transfer of ownership of pre-existing facilities?

Term of Agreement – Set the "life" and end date, if any, of the agreement. If no actual termination date is set or identifiable, define an action that would terminate the agreement such as payment of all debt service.

If facilities survive Term of Agreement identify who has what responsibilities with regard to ownership, reimbursement etc.

White Paper

Memorandum of Understanding

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

Memorandum of Understanding

If municipalities elect to enter into a Memorandum of Understanding ("MOU") prior to entering into an intermunicipal service agreement, the following matters should be considered and may be memorialized in a MOU:

- What is the precise scope of the project?
- Have the parties agreed on the salient terms of the intermunicipal service agreement and if so, what are they?
 - How much capacity does each municipality want?
- What is the total anticipated cost to be expended for the project, and is there a maximum cost that will void the agreement?
- How will the project be paid for?
 - Will there be one contract signed or will there be a contract for each municipality?
 - Are there anticipated in kind contributions and how will in kind contributions from individual municipalities be valued?
 - What is the basis of cost allocation?
- Who will be responsible for bidding the project?
- Who will be responsible for overseeing construction of the project?
- How will ownership interest in the project be determined?
- Who is going to maintain the project?
- How will costs of maintenance be determined?
- What will be the timeline for entering into an intermunicipal cooperation agreement?
- Legal effect of the MOU - is it binding or not binding?
 - Legal view?
 - Department of Environmental Protection's view?

White Paper
Operation & Maintenance

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

Operations and Maintenance: Responsibility and Budget / Cost

OVERVIEW

The Consent Order as adopted by all municipalities requires all separate sewer systems municipalities to prepare, implement and adopt an Operation and Maintenance Plan as approved by the Allegheny County Health Department (ACHD). Each municipality has prepared and submitted a plan to the Allegheny County Health Department. The components of the municipal plans are:

- Goals (Identify major goals consistent with General Standards)
- Legal Authority (Municipality must include legal authority for its sanitary sewer system through sewer use ordinance, service agreements or other legally binding documents)
- Measures & Activities (Elements appropriate and applicable to municipality)
- Design & Performance Provisions
- Monitoring, Measurement, and Program Modifications
- SSO Emergency Response Plan (The municipality must continue to implement the SSO emergency response plan developed and implemented under paragraph 11 of the ACO)
- Evaluation
- Capacity Enhancement Measures
- Plan Updates (Plan must be updated to describe any significant change in proposed actions and/or implementation schedule. The plan must also be updated to reflect available information on the performance of measures that have been implemented.)
- O & M Program Plan Audits (At least once every five years, after submission of the O & M Program Plan the municipality must conduct an audit, appropriate to the size of its sanitary sewer system and the number of overflows, and submit a report of such audit to the ACHD, evaluating the municipality O & M Program Plan and its compliance, including deficiencies and steps to respond to them)
- Funding of O & M Program Plan (The municipality shall prepare and implement a plan for obtaining adequate funding for the implementation of the components of the O & M Program Plan)

All of the above tasks would need addressed and documented. Agreements will need to occur as to who is implementing the above.

Combined systems will also have to work on Operation and Maintenance and follow their Nine Minimum Control Plans.

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

SHARED / COMMON FACILITIES

The Facilities will require Operations and Maintenance requirements similar to the municipal systems. Therefore the systems will need but are not limited to:

- Manhole Inspections
- Tving
- Repairs
- General Work
- Point of Connection Maintenance and Inspection
- Reporting
- Performance of Verification
 - Assessment
 - Capacity Analysis

The agreement needs to address which municipalities will take the lead in ensuring the work is completed on an annual basis. This work could be included in a municipality's annual operation and maintenance.

BUDGET

An annual budget will be required to be prepared, circulated, and approved by all parties.

FORM AND FORMAT

It needs agreed upon as to who will prepare the "Overall Sanitary Sewer Budget" in a format that is acceptable. Consideration needs given to detailing sub-budgets for each item. 3RWW has prepared an example budget (copy attached) that could be utilized.

LEVEL OF DETAIL

In preparation of the annual budget it is suggested the following be considered:

- Outside construction maintenance repairs
- Should Force Account work be included which includes labor and payment, taxes and benefits
- Use of equipment
- Maintenance and supply costs
- Rental of equipment
- Consultant Fee

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

DEBT SERVICE

Debt service must be included in the budget. Each year a summary of the debt statistics (unpaid balance, term completion, potential refinancing) should be included as well.

PROCESS OF THE BUDGET

The approval process will need detailed. The annual timing of when the budget is set and will it be approved by all. Is the approval by majority? How questions will be addressed both in content and revisions and timelines of response. Will annual escalator clauses be considered such as the Consumer Price Index (CPI)?

White Paper
Ownership & Permitting

**Chartiers Cooperative Agreement Committee
ALCOSAN POCs**

OWNERSHIP AND PERMITTING WHITE PAPER

Primary Author: Lawrence J Lennon, P.E., D.WRE

This document has been prepared by the primary author and reviewed by a committee of engineers and managers representing the Borough of Bridgeville, the Municipality of Mt. Lebanon, and the Townships of Scott and Upper St Clair under a grant received from 3 Rivers Wet Weather.

OVERVIEW

The selection of an organizational structure to own and operate shared facilities can substantially impact the need for, as well as the complexity and level of detail required of, an Intermunicipal Service Agreement (ISA). If the shared facilities are to be owned and operated by a single overarching entity (e.g., Environmental Improvement Compact (EIC) or Joint Authority) and the enabling Ordinances are passed, there should be no need for Service Agreements by and among the participating communities. In this instance, the joint entity would have complete responsibility and authority to undertake any required capital borrowing, budgeting, proper operation, and environmental compliance.

On the other hand, ownership of common facilities by a single municipality, such as the downstream point of connection (POC) community, exposes that community to direct levels of risk over which it has limited control. Risks include debt and borrowing limitations, recovering monetary outlays, liability, and potential enforcement actions. To be effective, the ISA must be written such that the risk is shared and that the sharing of such risk is enforceable. The situation is further complicated because many municipalities are involved in more than one complex ALCOSAN POC shed. Scott Township, for instance, is situated in five separate "complex sheds" (i.e., sewersheds with more than one municipal entity) and therefore could be negotiating, partially funding, and/or signing five separate agreements. Debt underwriting could become problematic, particularly where adjacent POC communities do not have equal ratings or borrowing capacity sufficient to meet their needs.

Types of Shared Facilities

The alternative analyses currently being prepared pursuant to the Wet Weather Feasibility Studies required by the Administrative Consent Orders (ACOs) for separate sanitary sewer systems generally include evaluation of four broad-based alternatives:

i. Convey all flow.

This alternative involves transporting all flow originating in the municipal collection systems unimpeded to ALCOSAN POCs via common interceptor/trunk sewers sized to transport the peak rates of flow without surcharging. This may require either replacement of the existing interceptor/trunk sewers with larger-diameter sewers or the installation of a parallel interceptor/trunk sewer to augment capacity. For this option, the operations would involve routine inspection of the system via manhole entry, annual closed circuit televising, annual cleaning, implementation of a Sanitary Sewer Overflow (SSO) Response Plan, and other ordinary operations. These actions could be completed via Force Account (i.e., municipal operating staff) or through third-party vendor contracts. Budget items would include typical sewer operation line items in addition to debt service for capital improvement amortization.

ii. Equalize and deliver attenuated flow rates.

This alternative would involve the construction of equalization basins sized to receive diverted storm flow response that exceeds existing sewer pipe conveyance capacity. Depending upon the availability of land, the depth of sewers, and other factors, this alternative could involve construction and operation of sewage pump stations. It may also include the installation of large-capacity blowers to mix and aerate the stored flow to minimize development of offensive odors and to minimize cleaning/flushing operations. Both the pump station and blower requirements involve the installation of electrically powered mechanical equipment, necessitating more extensive operation and maintenance than simple conveyance alternatives. This alternative will also require operation of the pump stations by an operator licensed by the Commonwealth of Pennsylvania. The requirement for a licensed operator enhances the regulatory exposure for violations of permit requirements.

iii. Conveyance and equalization.

Depending upon system hydraulics and availability of land, a combination of both i and ii above may be required to achieve compliance. In this instance, the operating and cost elements described above all will apply.

iv. Source flow reduction.

This alternative would involve work within the municipal collection systems, with the intention of minimizing the need for significant capital improvements for new shared facilities. In this instance, the ISA should be prepared to address continued operation and potential capital upgrades to existing shared conveyance facilities.

Implementation of any one, a combination of the three, and multiple variations within a single ALCOSAN POC shed are possibilities. For Combined Sewer Systems, there is the potential for implementation of equalization/treatment facilities. Although this paper does not specifically address equalization/treatment, the concepts discussed herein will be applicable to that concept as well.

Regulatory/Legal Requirements

Aside from permitting, which is discussed below, the ACOs executed among the separate sanitary sewer communities and the Allegheny County Health Department at Paragraph 17 OPERATION AND MAINTENANCE PROGRAM PLAN, subparagraph b) iii Legal Authority states:

“The Municipality must include legal authority for its Sanitary Sewer System through sewer use ordinances, service agreements, or other legally binding documents, to: ... (d) address flows from municipal satellite collection systems to the extent possible.”

Elements of Risk

In discussing and rendering decisions on the content and detail of an ISA, understanding and consideration of the elements of risk are warranted. As noted above, the management of risk can either be simplified or be rendered more complicated, depending on the ownership structure proposed.

Typical elements of risk management that should be considered include the following:

- Regulatory/Environmental
 - Permit violation
 - SSOs
 - Basement flooding
 - Missed compliance date
 - Release of noxious or explosive materials
 - Third-party lawsuits (e.g., PEDF, Sierra Club)
 - Compliance Orders for modification/upgrade
 - Criminal prosecution (licensed operator)
 - Intentional misrepresentation

- Liability
 - Tort
 - Property damage
 - Employee injury
 - Negligence or dereliction of duty
 - Contract
 - Breach
- Revenue
 - Initial Debt
 - Impact on municipal debt limitation
 - Cash flow
 - Inadequate cash flow to fund shared operations
 - Inadequate cash flow to fund individual system operations
 - Future capital project costs
 - Source of revenue
 - Rate increases
 - Influence of politics

OWNERSHIP OPTIONS

As indicated above, one of the first steps is to identify the “entity” that will own the common/shared facilities. Potential ownership and attendant billing options include the following:

- **Resident Community Option:** Ownership and operation by the community in which the facilities reside, with operation and billing based on Service Agreements with tributary municipalities.
- **Financing Authority Option:** Ownership by a joint Financing Authority with operation via lease-back arrangement to the Municipality where the facilities reside.
- **Joint Operating Authority Option:** Ownership and operation by a joint Operating Authority.
- **Ownership or Operation under an Intergovernmental Cooperation Agreement (Act 177):**
- **Ownership or Operation under an Environmental Improvement Compact (EIC).**

Debt underwriting for each of the ownership options listed above is discussed in the Financing Options White Paper.

Resident Community Ownership and Operation

This option envisions ownership and operation by the municipality in which the shared facilities are physically located. In many instances, this may be the current *modus operandi*. At first blush, this may appear to be the easiest way to arrange for ownership and operation. However, as noted above, it can place significant administrative, management, and operating burdens on the downstream

community. In situations where the downstream community is distressed or struggling financially, this solution may prove to be untenable. Consideration should be given to the size and expertise of the administrative staff as well as the operating staff. The administrative staff must have the capability and capacity to address new or expanded reporting, billing and collection, and financing duties. The operating staff may need to be expanded to include licensed operators and to take on operation and maintenance of the process/mechanical facilities that could be associated with sewage lift stations or equalization basins and so forth. Although not specifically an Act 177 entity, much of the approach described below for an Intergovernmental Cooperation Agreement is applicable for this option as well.

Municipal debt limitations may come into play, depending upon the source of funds pledged for repayment. Where tax revenues are the primary source of funds, the Local Unit Government Debt Act will impact borrowing capacity and will limit the amount of borrowing. The Act states:

“Three hundred fifty percent of its borrowing base in the case of all other local government units’ “borrowing base.” The annual arithmetic average of the total revenues for the three full fiscal years ended next preceding the date of the incurring of non-electoral debt or lease rental debt as set forth in a certificate stating the total revenues in each of these years and stating the average, executed by the authorized officials of the local government unit or by an independent accountant.”¹

Where self-liquidating debt is proposed (i.e., funding solely via use based rates, rentals, or other charges), debt ceiling is not usually an issue. However, where multiple municipal entities are involved, underwriting issues (e.g., pro rata shares for a single municipal entity across multiple sheds) could occur.

Financing Authority

This option envisions the formation of a financing entity that would arrange for construction of needed capital improvements, with all operation passed on to the local municipality via a lease-back agreement. As with the Resident Community model described above, consideration must be given to the size and expertise of the administrative and operating staff. Under this arrangement, the local municipality would be required to make semi-annual or quarterly debt service payments to the Financing Authority. Additionally, the Financing Authority may have the responsibility for setting the annual operations and maintenance budget, and the municipality may be legally obligated to establish rates and charges required for proper operation. The following language excerpted from a current active Lease-Back Agreement provides some insight into appropriate clauses:

¹ Local Unit Government Debt Act, Act 177 of 1996, as amended.

"PART THREE

LEASE OF THE PUBLIC UTILITY SYSTEM

The Authority agrees to lease and hereby does lease to the Borough and the Borough agrees to lease and hereby does lease from the Authority, the Public Utility System for the term and upon the conditions hereinafter set forth in this section, including all parts and parcels of real property and the buildings and equipment erected, constructed and situated thereon or which may hereafter be erected, constructed and situated thereon and all other property of the Authority real, personal and mixed now owned or hereafter acquired by the Authority and used or useful in connection with the Public Utility System including, without limiting the generality of the foregoing, lands, rights-of-way, easements and similar interests in real property and all buildings, laboratories, improvements, standpipes, tunnels, syphons, filters, flow meters, grit chambers, comminutors, chemical feeders, interceptors, reservoirs, wells, flumes, sluices, canals, basins, cribs, machinery, mains, conduits, hydrants, outfall sewers, tanks, vats, pipes, pipelines, water plants and systems, sewage treatment works and systems, dams, shops, structures, purification systems, pumping stations, fixtures, ejector stations, engines, boilers, pumps, meters, other equipment and any additions to existing transportation equipment.

The Borough agrees to make monthly payments to or on behalf of the Authority as consideration for the lease of the Public Utility System, and said monthly payments will be made on the first day of each and every month during the term of this lease. These lease payments shall be as follows:

- A. The amount required to pay, on a timely basis and strictly according to its terms, the Bank loan of _____ date _____ (Borough guarantee).*
- B. The amount required to pay, on a timely basis and strictly according to its terms, the PENNVEST loan of _____ date _____ (Borough guaranteed).*
- C. The sum of \$_____.00 to the Authority and said sum shall be deposited into the Authority General Fund.*
- D. The sum of \$_____.00 to be deposited into the System Reserve Fund.*

This Agreement of Lease shall remain in effect until the Authority no longer has any existing indebtedness or obligations so that it would be permitted to cease functioning under Pennsylvania law. At this time the Authority shall take appropriate steps to cease existence and to transfer its license, properties, and other assets to the Borough pursuant to Pennsylvania law.

PART FOUR

OPERATION AND MAINTENANCE OF THE PUBLIC UTILITY SYSTEM

The Borough during the term of this Agreement of Lease shall continuously operate the Public Utility System in an efficient and economical manner and will keep and maintain the Public Utility System in a state of good repair without cost to the Authority and will pay all cost and charges necessary for such maintenance and repair and will replace all equipment and furnishings from time to time as may be necessary. It is understood that this provision applies to all repairs, major as well as minor, without exception.

RATES AND CHARGES

The Borough covenants that it will enact and will keep in full force and effect during the term of this Agreement of Lease an ordinance or ordinances providing for the payment of reasonable sewer rates and water rates, and other charges for use of the facilities of the Public Utility System and for services to be rendered by the Borough. Said sewer rates and water rates, and other charges, and any other periodic payments to be made to the Borough by the Commonwealth of Pennsylvania or any other governmental agency for the use of the system or as a payment in lieu of a contribution towards the cost of construction of any of the facilities of the Public Utility System, any earnings from investments in the Public Utility System Fund and other available current revenues of the Borough, shall be sufficient, after making due and reasonable allowances for prompt payment discounts to customers (if any), contingencies and a margin of error in the estimates, to insure at all times sufficient funds to provide annually for the following: (1) the payment of the reasonable, proper and necessary costs of operation and maintenance of the Public Utility System including, without limiting the generality of the foregoing, administrative, engineering, legal, auditing and insurance expenses, payments to pension or retirement fund, taxes and the cost of such system improvements which, in the opinion of the Public Utility Engineer, shall be necessary to maintain, preserve and keep every part of the Public Utility System in good working condition, repair and working order; and (2) the rental payments provided for under this Agreement of Lease, as the same may from time to time be supplemented, and costs, fees, fines, and taxes, if any, levied or assessed against the Authority by reason of its operation or ownership of the Public Utility System. All such governmental costs, fees, fines and taxes shall be paid by the Public Utility System Fund.

The Borough covenants that it has enacted or will enact and keep in full force and effect during the term of the Agreement of Lease an ordinance requiring all owners of improved property to which sewer and/or water service is available to connect with said sewer and/or water line and that said ordinance will impose fines or penalties or otherwise provide for the enforcement of said ordinance as may be permitted by law.

Should the receipts and revenues from the Public Utility System be insufficient to enable the Borough to meet its obligations under the foregoing provisions of the Article, the Borough covenants that it will increase the sewer rates and the water rates, and other charges, or otherwise adjust the same, so that the receipts and revenues shall be sufficient for such purpose. The Borough further covenants to enforce said ordinance or ordinances and the collection of such sewer rates and water rates, and other charges, and, in the event they are not paid, to take necessary steps to reduce them to liens or to enforce collection in any other manner permitted by law.

OTHER AVAILABLE CURRENT REVENUES OF THE BOROUGH

The Borough covenants that, if the receipts and revenues from the Public Utility System shall have been insufficient to enable the Borough to meet the requirements of this lease, it will provide from other available current revenues of the Borough, within the limitations prescribed by law, an amount which, when added to the receipts and revenues of the Public Utility System collected by the Borough, will be sufficient to enable the Borough to meet its obligations under this Agreement of Lease as the same from time to time may be supplemented. The Borough also covenants to include in its General Fund budget for any particular fiscal year during the term of this Agreement of Lease any deficiencies in rental payments occurring in a previous year or years in addition to the amount of rental due under this Agreement of Lease for said year. If the Borough is required to spend monies from the General Fund to pay expenses from the Public Utility System, these monies shall be repaid to the General Fund from the Public Utility System Fund.

**SEGREGATION OF RECEIPTS AND REVENUES OF THE
PUBLIC UTILITY SYSTEM AND OTHER CURRENT REVENUES**

The Borough shall deposit all receipts and revenues from the Public Utility System, including any payments received from the Commonwealth of Pennsylvania or any agency for the use or as a payment for services or a payment in lieu of a contribution towards the cost of construction of the Public Utility System, and any moneys appropriated out of the current revenues of the Borough pursuant to Articles hereof, in an account (hereinafter called the "Public Utility Fund") separate and distinct from all other accounts of the Borough, which shall be established with an authorized depository. All moneys in the Public Utility System Fund shall be used by the Borough solely for the purpose of meeting obligations under this Agreement of Lease. The Borough shall withdraw from the Public Utility System Fund from time to time such amounts as shall be necessary to meet said obligations. The Borough shall have the right to invest the moneys in this fund from time to time at its discretion within the limitations prescribed by law.

NO PRIOR CHARGE ON REVENUES

The Borough covenants and agrees that during the term of this Agreement of Lease it will not create any charges on the receipts and revenues derived from the Public Utility System prior to the obligations of the Borough under this Lease Agreement."

Joint Operating Authority

This option envisions the formation of an independent municipal "body politic" that would have full ownership and operating responsibilities for the shared facilities. The following was copied directly from *Intergovernmental Cooperation Handbook, Sixth Edition (2006)*, as published by the Pennsylvania Department of Community and Economic Development:

"The Municipality Authorities Act of 2001 (Act 22 of 2001) authorizes the creation of municipal authorities by two or more local governments. These are termed joint authorities. Joint authorities received their main impetus in the 1960s when the federal Environmental Protection Agency embarked on a program of regionalization of municipal sewage treatment facilities. Numerous joint sewer authorities were formed in order to qualify for EPA grants. In many cases, these joint authorities represented the first time neighboring municipalities had ever cooperated in a joint program of a large magnitude. Joint authorities are most often used when major capital investments are required. In addition to sewage treatment, joint authorities have been formed for water supply, airports, bus transit systems, swimming pools and others. Joint authorities have well-established powers to receive grants, borrow money and operate revenue generating programs. The Municipality Authorities Act specifically enables authorities to sell bonds, acquire property, sign contracts and take similar actions. Handshake agreements do not convey such powers; Act 177 agreements do so only when the agreements are specifically drafted to do so. In contrast to the flexibility of Act 177 agreements, joint authorities must be governed by authority board members appointed by the elected officials of the

member municipalities. Once appointed, the decision-making power is vested in the board members. This can be a disadvantage in the view of some elected officials, since they may disagree with authority actions but have no control over those actions. More information on joint authorities is available from other publications of the Department of Community and Economic Development and the Pennsylvania Municipal Authorities Association.”²

Intergovernmental Cooperation Agreement (Act 177)

This option allows for shared ownership and control via an Intergovernmental Cooperation Agreement negotiated among the participants. As presented in the *Pennsylvania Legislator’s Municipal Deskbook, Third Edition (2006)*,

“Title 53 authorizes two or more “local governments” to “jointly cooperate in the exercise or in the performance of their respective governmental functions, powers or responsibilities.” Such cooperation is to be authorized by ordinance, which must specify the conditions, duration, purpose, manner, and extent of any financing, organizational structure, manner in which property will be acquired, managed, and disposed of, and that the entity created will be empowered to enter into certain employee related contracts. Also, intergovernmental cooperation may be mandated by voters by initiative or referendum.”³

Details on intergovernmental cooperation are available from the Commonwealth of Pennsylvania at

<http://www.westwhiteland.org/Community%20and%20Economic%20Development%20Publications/Intergovernmental%20Cooperation%20Handbook.pdf>.

The following is another excerpt from the *Intergovernmental Cooperation Handbook, Sixth Edition (2006)*:

“The required features of an intergovernmental cooperation agreement established according to the terms of Act 177 include the following:

- 1. The agreement must be enacted by ordinance (Section 2305).*
- 2. The ordinance must specify (Section 2307):*
 - a. The conditions of the agreement.*
 - b. The duration of the agreement.*
 - c. The purpose and objectives of the agreement, including the powers and scope of authority delegated in the agreement.*
 - d. The manner and extent of financing the agreement.*
 - e. The organizational structure necessary to implement the agreement.*

² *Intergovernmental Cooperation Handbook, Sixth Edition, 2006*, as published by the Pennsylvania Department of Community and Economic Development, p. 13.

³ *Pennsylvania Legislator’s Municipal Deskbook, Third Edition, 2006*, p. 25.

- f. *The manner in which property, real or personal shall be acquired, licensed, or disposed of.*
- g. *That the entity created under this section shall be empowered to enter into contracts for policies of group insurance and employee benefits, including Social Security, for its employees.*

These items can be covered in the ordinance document itself, but usually are addressed in the agreement document and incorporated into the ordinance by reference (as an attachment to the ordinance).⁴

Joint municipal underwriting and financing of capital debt for the shared facilities is an issue to be discussed with legal counsel.

Environmental Improvement Compact

This option has not been widely utilized in the operation of sanitary sewer systems. The *Pennsylvania Legislator's Municipal Deskbook, Third Edition (2006)*, states the following:

"The Environmental Improvement Compact Act authorizes municipalities, through initiative and referendum, to agree on the structure of government and powers concerning one or more municipal functions. Also authorized is a board for the purpose of acquiring, holding, constructing, improving, maintaining and operating, owning or leasing, either in the capacity of the lessor or lessee, for any government function of two or more municipalities. The board of an environmental improvement compact is elected by the voters, has the power to levy taxes up to two mills, and has corporate powers similar to a municipality, including the power of eminent domain."⁵

According to the *Intergovernmental Cooperation Handbook, Sixth Edition (2006)*,

"Act 39 of 1972 provides for the establishment of an Environmental Improvement Compact (EIC). An EIC, when formed under the act, is empowered to deliver one or more municipal functions involving two or more municipalities. The Department of Community and Economic Development can provide assistance to municipalities exploring this concept. An environmental improvement compact is quite different from any other form of intergovernmental cooperation discussed in this handbook. Some of the key characteristics of an EIC include:
a. An EIC must be created by referendum in the participating municipalities, not by action of the governing body.

⁴ *Intergovernmental Cooperation Handbook, Sixth Edition, 2006*, as published by the Pennsylvania Department of Community and Economic Development, p. 8.

⁵ *Pennsylvania Legislator's Municipal Deskbook, Third Edition, 2006*, pp. 26–27.

- b. The EIC Board is directly elected by the citizens of the participating municipalities, rather than being appointed by municipal governing bodies.*
- c. An EIC has corporate powers similar to those of a municipality, including the right of eminent domain.*
- d. An EIC has the power to fix and collect property taxes up to two mills.*

Why would a municipality support the establishment of such an independent body as a means of intergovernmental cooperation? There are several possibilities. It may be desirable to separate the function, perhaps a controversial multimunicipality storm water management system, from control by individual municipal governing bodies. A separate tax for this purpose may be needed because of municipal tax limits or political realities. And, the mandate of a referendum may be needed to get the project started. An EIC may be just the answer for the thorniest problem.”⁶

For the Act 177 and EIC options, the transfer of ownership of the existing common/shared facilities may be required.

The issue of joint municipal underwriting and financing of capital debt for the shared facilities under the EIC option will require consultation with legal and bond counsel. Tax millage limitations may limit viability of this option where debt repayment and operating costs exceed the revenue generated by assessed millage.

PERMITTING

In any arrangement with shared facilities, it is important to identify both the permits required and the permit holder(s) for existing and proposed facilities. Obviously, permitting is a significant issue that will impact facility owners as violations of permit requirements will be the responsibility of the permit holder. In this regard, it is specifically noted here that at the March 2011 Three Rivers Solicitors meeting, PaDEP's staff attorney reiterated the Department's position that all SSOs must be eliminated. To this issue, it is also specifically noted that the design criteria (i.e., Design Return Storm) upon which any solution to convey, or to contain and convey, would be based has not yet been established to the extent necessary to defend such designs if resulting conditions were not 100% effective in eliminating SSOs, regardless of storm intensity/duration. As an example, if the municipal Feasibility Studies conclude that a 2-Year Return Storm is to be implemented and a 5-Year Return Storm occurs that results in an SSO, it is important to understand the regulatory implications and the party responsible.

⁶ *Intergovernmental Cooperation Handbook, Sixth Edition, 2006, as published by the Pennsylvania Department of Community and Economic Development, p. 15.*

For equalization basins constructed in the last 20 years, PaDEP has been allowing overflow pipes on the basins so that flow in excess of the design storm (2-year discrete event typically) can be relieved locally. Such discharges are "illegal" and are neither permissible nor permissible. PaDEP uses its discretion in terms of enforcement for these releases.

From an ownership and operation standpoint, three types of regulatory permits should be anticipated:

- Part II Water Quality Management permit,
- National Pollutant Discharge Elimination System (NPDES) permits, and
- Erosion and Sedimentation Control and Stormwater Management permits.

Part II Water Quality Management Permit (Part II WQM)

The PaDEP Part II WQM permits authorize construction, modification and operation of wastewater treatment, conveyance, and collection facilities. The permits also include general and specific operating requirements that address the construction as well as operation and maintenance phases. By implication and reference to the Pennsylvania Clean Streams Law, these permits may regulate actions as opposed to discharges and create exposure to state regulatory action.

For projects involving only sewer lines, review of recent Part II WQM permits suggests that the potential operating related regulatory exposure is a "Special Condition," which states, "*The bypass of raw or inadequately treated sewage to the ground or waters of the Commonwealth as a result of the construction project is strictly prohibited.*"

Sewage treatment and storage facility Part II WQM permits include General Conditions that specifically addresses the NPDES permit and state,

"No discharge is authorized from these facilities unless approved by an NPDES number."

"If at any time, the sewerage facilities covered by this permit create a public nuisance, including but not limited to causing malodors or causing environmental harm to waters of the commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm."

NPDES Permits

An NPDES permit is the authorization to discharge pollutants to waters of the United States and the Commonwealth of Pennsylvania. NPDES permits are issued by the Commonwealth which has primacy; however, these permits expose the

permitter to enforcement and regulation at the federal level by the U.S. Environmental Protection Agency (EPA) and Department of Justice (DOJ).

Two types of NPDES permits are at issue in this instance:

- (1) Stormwater discharges from both temporary and permanent facilities, and
- (2) Satellite Collection System Permit.

At the present time, the potential for permitting of Satellite Collection Systems remains under review at the federal level. The public comment period has passed, and a final determination has been suspended. The following EPA Web sites provide updated information on this issue:

<http://yosemite.epa.gov/oepi/RuleGate.nsf/byRIN/2040-AD02?opendocument#4>

<http://cfpub.epa.gov/npdes/wetweather.cfm>

While NPDES permits are not currently being issued for or to Satellite Collection Systems, as noted above, it is the EPA's intent to issue such permits. As described in Chapter 92 of PaDEP's Regulations regarding NPDES permits, "*A permit may not be issued, modified, or reissued for a sanitary sewer overflow.*" So when Satellite Collection Systems are issued NPDES permits, SSOs can be expected to be specifically excluded from authorization under current language.

An ISA should address and describe the responsibilities of each party to the agreement relative to the following:

- Duty to properly operate their tributary system so as not to contribute to a Permit violation.
- Compliance with Regulatory Orders.
- Payment of fines for non-compliance or violation of the federal Clean Water Act or Pennsylvania Clean Streams Law.
- Duty to defend.

White Paper

Recitals

Chartiers Cooperative Agreement Committee
ALCOSAN POC's

RECITALS

OVERVIEW

This section provides the foundation for the Agreement and discusses the intent of the parties to the Agreement. It details out who is involved and why. All aspects of the process implementation, ownership, operation and cost sharing measures for existing and proposed joint facilities to be constructed should be considered and addressed.

OPERATION AND MAINTENANCE

Who is going to operate and maintain the system needs to be addressed. Each municipality is required to adopt an O & M Plan per the Consent Order and details on implementation and costs need reviewed. The new facility needs to be part of the plan. Failure to implement the plan as well as consequences of the failure need detailed.

GEOGRAPHICAL AREA

The specific area needs delineated as well as depicted on a map.

OWNERSHIP

Who will own the facilities needs to determine. Is it the municipality that is the host community or some other type of entity?

DISPUTES

How disputes will be discussed and resolved needs addressed. Will it be a review committee or will it go to arbitration or perhaps court. What defines a dispute should be explained.

PRO RATE SHARING OF COSTS

The Agreement needs to review all potential scenarios for addressing the sharing of costs. Cost to be defined as debt services and operating costs. Cost sharing should be explained to see how it relates to capacity.

PERMITS

All existing permits should be researched. In addition, if new permits are necessary it needs to be determined who will be the permittee.

AGREEMENT

All existing agreements need to be researched and reviewed. If any Agreement needs to be null and void they also need to be reviewed and listed. This is the municipality's opportunity to straighten out any and all sewer agreements.

SHARED FACILITIES

All shared facilities need detailed.

Synopsis of Existing Agreements

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

Existing Agreements

Whereas, the Borough of Bridgeville, Municipality of Mt. Lebanon, Township of Scott and the Township of Upper St. Clair desires to enter into an agreement to construct, maintain or rehabilitate the sanitary sewers with ALCOSAN sewershed also known as Point of Connections 48, 49, 53-10; whereas the Borough of Bridgeville, Municipality of Mt. Lebanon, Township of Scott and the Township of Upper St. Clair have entered into various agreements in the past as follows:

1. Agreement Between Township of Mt. Lebanon and Township of Scott

Date: February 15, 1926

Purpose:

- To construct and operate a trunk sanitary sewer from the corner of Scrubgrass and Cochran Road and Hope Hollow Road to Chartiers Creek in the Township of Scott

General Information:

- The Township of Mt. Lebanon constructed the sewer and paid for it
- The agreement grants both communities the right to make connections to the trunk sewers located within the other municipality when deemed necessary subject to collection of a fee and proportional reimbursement to Mt. Lebanon.

Cost:

- \$10,000

Future Maintenance:

- Maintenance shall be by the parties in proportion to their contributions to the cost of construction.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

2. Agreement between Township of Mt. Lebanon and Scott Township

Date: August 15, 1927

Purpose:

- To construct a trunk sanitary sewer for the sewers from Meadowcroft Avenue and an unnamed street in Parker Gardens Plan through the properties of Kennedy, Husler, Roessier, Meyers to connect with the existing trunk sanitary sewer in Scott Township to service the Parker Gardens Plan

General Information:

- This was more of an easement agreement allowing the Township of Mt. Lebanon to build a sewer.

Cost:

- \$6,020

3. Agreement Township of Mt. Lebanon and Township of Scott

Date: November 10, 1936

Purpose:

- To agree on the payments from a previous agreement from November 14, 1927 for the trunk sanitary sewer in Hope Hollow in Scott Township due to lack of payment.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

4. Agreement between Township of Scott and the Township of Mt. Lebanon

Date: April 14, 1938

Purpose:

- Construct a trunk sanitary sewer for the Oxford Plan of Lots in Scott and Mt. Lebanon Townships for the purpose of providing sanitary sewers for the entire watershed abutting upon and tributary to the Painters Run Sewer.
- The agreement made arrangements for Scott Township to pay Mt. Lebanon for the connection with Scott baring responsibility for the construction & maintenance of the sewer connecting into Painters Run.

General Information:

- Scott was having 2 more connection into the interceptor.
- The project was built by Scott Township

Cost:

- Scott Township paid \$6,000 total - \$1,500 / year
- Scott paid \$8,300 for the 2 connections

Future Maintenance:

- Scott Township will maintain their sewers at their costs

5. Agreement between Township of Upper St. Clair and Township of Mt. Lebanon

Date: August 11, 1949

Purpose:

- The Township of Mt. Lebanon granted to Upper St. Clair the right to tie into their system, the area located in the Painter's Run – Beadling Valley at or near Gilkeson Road and the watershed lying between the north easterly side of Fort Couch Road and the dividing line between the Township of Mt. Lebanon, Upper St. Clair, the Borough of Bethel and the area within Upper St. Clair of English Village, Washington Terrace and the Locust Manor Plans.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

General Information:

- The Township of Upper St. Clair constructed the sewer. All agreed that all roof and surface drainage was not to be tied into the sewers.

Cost:

- \$10,000

Future Maintenance:

- The Township of Upper St. Clair was responsible for the sewer.

6. Agreement between the municipality of Mt. Lebanon and the Borough of Castle Shannon

Date: September 10, 1951

Purpose:

- Gave each municipality the right to tie in and construct sewer

General Information:

- No roof or surface drainage permitted in the sanitary sewer.
- Each municipality maintained the sewer within their municipality

Cost:

- \$0

7. Agreement between the Township of Mt. Lebanon and the Township of Scott

Date: April 25, 1955

Purpose:

- The Township of Mt. Lebanon granted to the Township of Scott the right to connect with the trunk sanitary sewer of Mt. Lebanon in any watershed where such connection is necessary for proper disposition of sewage. Scott did the same for Mt. Lebanon

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

General Information:

- Scott Township entered into an agreement with Mt. Lebanon regarding connection to and maintenance of sanitary sewers “regardless of point of origin” wherein each grants to the other the “... right to connect with the trunk sewers of ...” the “at its own expense...”. Additionally, all sewers constructed by Mt. Lebanon in Scott Township “shall become the property of Scott Township and shall be maintained by Scott Township...”. The agreement contains reciprocal language as to sewers constructed by Scott Township in the Municipality of Mt. Lebanon and addresses then existing and future sewers to be constructed. The agreement also addresses individual interests and requires “all roof and surface water drainage shall be excluded from the sewers to be constructed...”.

Cost:

- Each municipality built their own. Any cost exceeding \$1,000 to the Hope Hollow sewer & maintenance will be born equally by Mt. Lebanon and Scott Township

Future Maintenance:

- Maintained by the municipality

8. Agreement between Municipality of Mt. Lebanon and Township of Upper St. Clair

Date: December 1, 1955

Purpose:

- Granting USC the right to connect into the trunk sewers of Painters Run Sewershed.
- The agreement also stipulated that all trunk sewers constructed by the Municipality that ran through the Township were to become the property of the Township and all trunk sewers constructed by the Township that ran through the Municipality were to become the property of the Municipality.

General Information:

- No matter who built the sanitary trunk sewers after construction the sewers became the property of the municipality in which they are located and shall be maintained at the expense of the municipality in which they are located.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

Cost: N/A

Future Maintenance:

- They would be maintained at the expense of the municipality in which they are located.

9. Agreement between the Township of Upper St. Clair and the Township of Mt. Lebanon

Date: November 21, 1949

Purpose:

- Connection by the Township of Upper St. Clair with an existing sewer of the Township of Mt. Lebanon
- Assess against Township of Upper St. Clair the sum of \$10,000 from previous agreement dated August 11, 1949
- Township of Upper St. Clair pay all expenses for the construction of connecting sewers
- The proportion of expense for repairs of the trunk sewer in Township of Mt. Lebanon, in the ratio of 10% paid by USC and 90% by Mt. Lebanon.
- If Mt. Lebanon is required by ALCOSAN to extend the trunk sewer in the watershed servicing USC the Township of Upper St. Clair will pay 10% of the cost of the extension.

Cost:

Future Maintenance:

10. Agreement between Borough of Bethel and the Borough of Castle Shannon

Date: July 9, 1951

Purpose:

- Bethel Borough is contemplating construction of a sanitary sewer system in the upper parts of Saw Mill Run Valley in part of the Hillcrest and Welton Acres districts and in the section of the borough adjoining the south side of Connor Road near the corner of Library Road.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

General Information:

- The Borough of Bethel agrees that all roofing and surface water drainage shall be excluded from the sanitary sewers and trunk line sanitary sewers.

Cost: \$1.00

Future Maintenance:

- The cost of maintenance will be covered by the Borough of Bethel. Any excess charges that could be assessed against the Borough of Castle Shannon by ALCOSAN will be covered by the Borough of Bethel.

11. Agreement between Township of Mt. Lebanon and Borough of Castle Shannon

Date: September 24, 1951

Purpose:

- Since sanitary sewers in some cases drain into and through both the Borough of Castle Shannon and Township of Mt. Lebanon an arrangement was made for connections with the sanitary sewer system in each municipality and for maintenance.

General Information:

- All roof and surface water drainage shall be excluded from the sewers constructed.

Cost:

Future Maintenance:

- The Municipality that constructs the line will assume cost. If it is located in another municipality the municipality in which it is located will assume the liability for maintenance.

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

12. Agreement between Borough of Bethel and Township of Mt. Lebanon

Date: November 13, 1950

Purpose:

- Borough of Bethel will construct certain lateral sewers in the Borough of Bethel that will naturally drain towards and into the Township of Mt. Lebanon
- Borough of Bethel made application to the Township of Mt. Lebanon for the right to connect into the sewer system.

General Information:

- The Borough of Bethel will secure all rights of way and any permits that are required.
- The Borough of Bethel agrees that a roof and surface water drainage shall be excluded from the sewers constructed.

Cost: \$1,600.00

Future Maintenance:

- The Borough of Bethel is responsible for all maintenance.

13. Report of Viewers – Agreement between the Township of Mt. Lebanon and the Township of Upper St. Clair (Refer to No. 5 of this Report)

Date: November 21, 1949

Chartiers Cooperative Agreement Committee
ALCOSAN POCs

14. Ordinance No. 814

Date: April 28, 1929

Purpose:

- The Township of Mt. Lebanon constructing a truck sewer from points in Mt. Lebanon at the end of the present sewers in Seminole Hills Plan, Beverly Heights Plan and the Cedar Boulevard Disposal Plant.

15. A Decree from the Commonwealth of Pennsylvania Department of Health Samuel G. Dixon to Scott Township

Date: December 2, 1910

Purpose:

- The installation of a sanitary sewer system and grating a permit to discharge the sewage therefrom temporarily into Chartiers Creek, Painters Run and Saw Mill Run within the limits of Scott Township