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DEPARTMENT OF ENVIRONMENTAL PROTECTION

#613 Planning Basics

Chapter 1: Sewage Facilities Planning



CHAPTER OBJECTIVES:

After completing this chapter, you will be able to . . .

- Explain the purpose and importance of sewage facilities planning.
- List the parties who are involved in the planning process.
- Explain how onlot sewage systems are viewed now compared to how they were viewed prior to the 1990s.
- Understand the municipality's responsibility to develop and maintain an up-to-date sewage facilities official plan.

The workbook and self-study guide were designed to be viewed together. Within these two documents, you will be given directions on when to move back and forth between the two books. The self-study guide presents the course content, and the workbook contains activities and exercises to complete and also provides a place to take notes. The course was designed so that you print out the workbook and needed resources. That way you can take notes and complete activities and exercises in the hard copy of the workbook as you view the self-study guide on the computer.

To begin each chapter, review the opening pages in the workbook. The first two pages of each workbook chapter contain the chapter objectives, checklists to help you organize your work, an estimated time for completing the chapter, and a list of the resources needed to successfully complete the course work for each chapter.

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Many areas of the commonwealth have witnessed rapid development over the past few decades. New commercial growth and housing developments often result in increased traffic flow, the need for larger schools, tax increases, additional police, upgraded infrastructure, and reduced open space.

The average citizen understands the reality of more cars on the road or more children in the schools, but few think about how all of this new development affects the sewage needs of the community.

In some communities, new houses are connected to a public sewer system that is treated by a centralized sewage treatment plant. But if community sewerage is not available, these needs must be met by an onlot sewage system, whether it's a community onlot system serving more than one lot or an individual onlot system.



New commercial and residential growth requires upgrades to infrastructure, including sewage disposal.





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SEWAGE FACILITIES ACT (ACT 537)

The Pennsylvania Sewage Facilities Act (Act 537) was enacted in 1966 to address the needs of municipal development and to provide local government with the tools to correct existing sewage disposal problems.

Municipalities are largely responsible for administering the Act 537 sewage facilities program. Therefore, SEOs serving municipalities where new land development is proposed will have a direct role to play in the sewage planning process. To assist municipalities in fulfilling this responsibility, the Department of Environmental Protection (DEP) provides technical assistance, financial assistance, and oversight.

Before we go any further, let's take a look at the history behind Act 537 and why it came about.





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THE HISTORY BEHIND ACT 537

1940s+ SUBURBAN HOUSING BOOM

When World War II ended in 1945, Pennsylvania, like many other states in America, saw a migration of people out of its cities and boroughs and into new housing developments in the surrounding open land. As the decades passed, the initial housing boom in the suburbs continued to spread farther out into the rural areas of Pennsylvania.

With this shift in population came concerns about how wastewater created by these new homes would be treated and disposed. In more developed areas, central sewer systems could be economically justified. But in the less populated suburban and rural areas, onlot sewage systems on individual lots were used. These were initially primitive methods, such as cesspools, seepage pits, and simple septic tanks with gravel-lined trenches that led to a nearby stream or ditch.



After World War II, people began to move out of cities and boroughs and into new housing developments in the suburbs.





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1960s

MALFUNCTIONING ONLOT SEWAGE SYSTEMS

Without any uniform standards for onlot system design, installation, or maintenance practices, a high percentage of onlot sewage systems began to malfunction. These systems either polluted or threatened to contaminate the rural drinking water supply.

Within two decades of the start of the post-World War II housing boom, Pennsylvania found itself with overloaded central sewage treatment systems, a proliferation of poorly operated small treatment systems, and malfunctioning onlot sewage systems, some of which were directly discharging waste into waterways. The resulting surface and groundwater deterioration posed a serious public health concern.



A lack of uniform standards for onlot systems resulted in many malfunctions and serious health concerns.





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1966

PROTECTING PUBLIC HEALTH

In 1966, the Pennsylvania General Assembly passed the **Sewage Facilities Act (Act 537)** to address the problems caused by malfunctioning public and onlot sewage systems and the need for adequate wastewater disposal. The act established the following requirements:

- Municipalities must develop an **official plan** to address a community's sewage needs. The official plan must address public sewer needs and ensure proper siting and operation of onlot sewage systems.
- Standards for siting and designing onlot sewage systems must be followed.
- Permits for onlot sewage systems must be issued prior to installation.



Act 537 requires all municipalities in the state to develop and maintain an up-to-date sewage facilities **official plan**. This plan, which can be developed individually or jointly with other municipalities, addresses the present and future sewage disposal needs of a community. Each municipality's official plan should show the areas where central sewage collection is provided and where onlot sewage systems are used.

In addition to describing sewage disposal methods used by existing development, the official plan should address the methods proposed for use in areas not yet developed. When new development is proposed, **planning modules** are used to document changes to a municipality's official plan.





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1970s REGULATING ONLOT SYSTEMS

Act 537 of 1966 required proper sewage planning and oversight, which has resulted in fewer sewage problems and improved public health protection. The process of considering adequate sewage treatment in the conceptual stages of land development is called **sewage facilities planning**, and it involves the municipality, the local agency SEO, and DEP.

In the 1970s, **state regulations** (known as Title 25 of the Pennsylvania Code, Chapters 71, 72, and 73) were created for the administration of sewage facilities planning and permitting.

The process of considering adequate sewage treatment in the conceptual stages of land development is called “**sewage facilities planning**.” This process requires cooperation among the municipality, the local agency SEO, and DEP.





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1990s–2000s

ONLOT SEWAGE CONSIDERED A LONG-TERM SOLUTION

After decades of being looked at as temporary, short-term fixes until public sewer (“the big pipe”) was available, onlot sewage systems have become recognized as viable long-term solutions for treating sewage in a community. As a result, onlot sewage systems are increasingly viewed as part of a municipality’s **permanent infrastructure**, much like roads and public sewers are.





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WHAT ACT 537 ACCOMPLISHES

Now that we understand why the Sewage Facilities Act was created, let's examine the specific details of what it was meant to do.

Section 3 of Act 537, the declaration of policy, provides a detailed explanation of what this law accomplishes.



Go to **Chapter I Workbook** to complete the following exercise:

Exercise I-1: Act 537 Declaration of Policy.



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WHAT ACT 537 ACCOMPLISHES (continued)

The declaration of policy summarizes what the Commonwealth of Pennsylvania is striving to accomplish through Act 537, namely to protect the health, safety, and welfare of its citizens with regard to how sewage waste is disposed. It addresses the need for local governments to be technically competent and to consider the best available technology and the use of intermunicipal cooperation where appropriate.

Act 537 requires all municipalities to participate in the planning process. It also gives municipalities access to assistance from DEP and provides the authority municipalities need to enforce sewage violations.





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KEY POINTS

- In 1966, the Pennsylvania General Assembly passed Act 537 (the Sewage Facilities Act) that requires all municipalities to develop an official plan to address current and future sewage disposal needs.
- Even though municipalities are ultimately responsible for administering the Act 537 sewage facilities program, local agency SEOs play an important role in the planning process.
- The Department of Environmental Protection (DEP) provides oversight of Act 537 and offers technical and financial assistance to municipalities.
- The municipality, the local agency SEO, and DEP are involved in the planning process.
- The process of considering adequate sewage treatment in the conceptual stages of land development is called sewage facilities planning.
- The purpose of sewage facilities planning is to protect the public health, safety, and welfare.
- Onlot sewage disposal is now viewed as part of the municipality's permanent infrastructure.

