Chapter 13. PROTECT YOUR SYSTEM - MAINTAIN FINANCIAL CAPACITY

A. Introduction

"Capacity" is the ability to manage, operate and maintain a wastewater system. This includes operating in accordance with recognized accounting practices, compliance with federal and state laws, and accepted practices for maintaining and improving a utility system.

A wastewater system is one of the most costly items your community will ever invest in. In fact, this community investment, on a per person basis, can easily exceed the value of a luxury car. The old adage of "out of sight - out of mind" must be avoided at all costs. Once the wastewater system is constructed and operating, the work is just beginning. You must be prepared to operate the utility system as a business. The capacity to do this covers three areas known by the acronym **MOM**, which stands for **M**aintenance, **O**peration and Management. Before finalizing funding for your system, funders will require you to develop ordinances or resolutions for your system. These rules should address viability.

B. Maintenance

The following list covers elements of long term maintenance for your system.

- Develop a maintenance plan
- Develop a maintenance schedule
- Maintain an equipment inventory
- Develop ordinances describing how new connections are to be made and the materials that should be used
- Keep reports about maintenance activities and make monthly reports to the governing body
- Maintain accountability through current job descriptions for key personnel
- Develop appropriate Operation and Maintenance Manuals

C. Operation

Routine operations tasks and elements include the following.

- Properly trained operator(s)
- Adequate funds for continued training
- Adequately paid operators
- Maintenance of safety
- Maintaining the proper use of the system
- Development of an adequate service agreement if a third party is operating your system

D. Management

A viable management system will contain the following elements.

- Billing and collecting fees
- Minimizing the effect of uncollected accounts
- Maintaining adequate rates that are adjust yearly
- Maintaining compliance with regulatory and/or code requirements
- Developing codes or ordinances (resolutions for counties) that articulate how the system is to be used, maintained, financed, and governed (enforcement clauses)
- Applying business practices to the management of the system

1. *Billing and collecting fees*

It is important to establish a regular billing cycle that customers can count on. If possible, billing should be monthly. Some communities and counties (for sewer districts) collect user fees through property tax rolls; fees are a special assessment. In either case, revenues should make the payment of user fees due at the first of the month if most of the bills are paid at the end of the month. If you are collecting user fees through property tax payments, work with your funders to have the debt payment due after tax revenues are collected.

Billing and collection is usually the largest administrative function for a small system. Someone will be needed to prepare and send the bills to customers. Someone will be needed to process the payment of fees, and to deposit them in an interest bearing demand account. If possible, this should be two different people. Money can be saved if people volunteer to do these functions. If a small wastewater system plans to pay someone for this type of service, the governing body should strongly consider having a third party to handle billing and collections. Banks, a local rural electric cooperative, a rural water district, or a local bookkeeper and/or accountant are some possible third parties that could provide financial services.

2. *Compliance with regulations and codes*

Every wastewater system in some way is covered by state and federal regulations and/or county codes. Usually systems that do not discharge into or towards a water course (non-discharging) are covered by county codes (resolutions). Onsite septic tanks are considered non-discharging systems. Systems that discharge effluent into or towards a water course are permitted by the Kansas Department of Health and Environment. A permitted discharging system must be operated by licensed certified personnel. Counties are generally responsible for monitoring non-discharging systems for compliance with county codes. The permit holder for a discharging system is required to make regular reports to KDHE detailing how well the wastewater system is complying with environmental regulations and standards. A permit holder should develop a schedule that describes what compliance sampling must be

done, when it must be done, and how results are to be reported to KDHE. It is important for a permit holder to fully comply with all environmental requirements. Centrally managed systems that use onsite non-discharging systems should comply with county codes. Do not expose your community to governmental enforcement actions or private environmental liability lawsuits.

3. *Adequate ordinances or resolutions*

Adequate ordinances or resolutions are needed to articulate how your system is to be maintained. Operated, and administered. Incorporated cities use ordinances and counties use resolutions. Your governing ordinances or resolutions should:

- Insure the system meets environmental regulations and/or codes;
- Articulate the proper use of the system;
- Fully describe materials to be used to maintain the system;
- Describe how new connections are to be made;
- Address financial management including rates, procedures for billing and collecting, and the collection of unpaid accounts.

4. *Uncollected fees and accounts*

Small systems that rely on payments from a few patrons cannot afford to lose significant amounts of revenue. A few homes not paying their user fees for a few months can seriously compromise the financial health of a system. Utility budgets are very tight, and are based on predictable revenue streams. When the revenue stream is interrupted, financial problems begin occurring. Without enough revenue, a system may have to delay paying bills; late payments usually result in costly late payment charges. Also, personnel may not get paid on time or rates may need to be raised to generate enough money to pay bills. A community should plan how to handle uncollected fees. First it is important to know your community, and realize that the phenomena of uncollected fees can happen in most rural areas. A typical rural community is susceptible to uncollected accounts due to (1) cyclical economic downturns (agricultural or mineral based economies), (2) mobile populations renting homes, people leave resulting in vacant homes, and (3) change of ownership can leave a home vacant for several months. The following chart shows possible solutions and to whom these solutions apply.

Possible Solutions for Uncollected Accounts

Applicable (yes or no)

Scenarios/ Options	(1) Disconnect water service	(2) Deposit for establishing new service	(3) Sufficient user rate to absorb losses	(4) Lien upon the property of the connection
A town with its own public water supply system	yes	yes	yes	yes
A town that has a public water system that is owned by another entity (example, a rural water district)	yes	yes	yes	yes
A town that has no public water supply system	no	yes	yes	yes
Sewer district that is governed by the county	no	no	yes	yes

Key

(1) Sewer service cannot be stopped, but an incorporated city that owns its own water system can discontinue water service if sewer fees are not paid. In an incorporated city where the public water supply system is owned by another entity, through a franchise agreement the city can have that entity discontinue water service if a sewer bill is not paid. An attorney should be consulted when developing a new or revised franchise agreement.

(2) A deposit for new service can be charged. Non-payment could result in a loss of the deposit. The deposit should be refundable. This is appropriate if your community has many

renters.

(3) Simply charge a high enough rate to generate revenue above the amount necessary to pay bills. Allow a small surplus to build to handle emergencies or interruptions in the revenue stream.

(4) Both cities and counties can place a lien against property in order to recoup unpaid fees. Consult your attorney before doing this.

E. Treat Your Utility As A Business

1. *Maintain healthy operating ratio*

All expenses should be recovered primarily through user charges; your system should be self-sustaining. Your system should be operated efficiently. All expenses attributable to the utility system must be identified and budgeted for, and all revenue sources should be identified. Also the short and long term predictability of each revenue stream (source) should be determined. Plan for changes in the make up of population. As your population ages, it will use less water and cause decreased revenues for a rate structure tied to water consumption. Future growth may mean it may be necessary now to start a capital improvement account. Customers want quality service and information about the product they purchase. Review your rates each year at the same time you develop your operating budget. It is wise to maintain an operating ratio of 1:1 or better. To calculate the ratio, divide the total revenues by the total operating expenses. If you check the operating ratio every month and compare it to past values, it will show you the trend of finances for your utility. Sounds simple, but you will need to dig through the accounting records to find the numbers.

Revenues for a financially self-sufficient utility are mainly obtained from user service charges, but they often include other charges for special services. Interest earnings are counted as revenue.

2. *Operating Expenses*

Operating expenses are the costs associated with providing and maintaining the utility's services. Examples are wages and benefits for employees, administrative overhead, chemicals and electricity for treatment, parts, tools, money spent or put in reserves for routine replacement of equipment, and the principle and interest on loans or bonds. Operating expenses do not include the purchase costs of new capital facilities (like more treatment capacity or sewer lines). Since municipal (publicly owned) operations are generally required to provide money for depreciation, it is not an operating expense.

It is best to calculate the operating ratio on a year-to-date basis since revenues and expenses

usually vary greatly from month to month. The minimum operating ratios for a financially health utility will depend on its debt situation. An operating ratio of 1.00 is the bare minimum for a self supporting utility. If a utility has any outstanding debt, the ratio will need to be greater than 1.00. How much greater depends on the debt service coverage requirement. Your financial advisor or bond counselor can help you determine your necessary operating ratio.

You should pay special attention to the trend in the operating ratios. It can give you an early warning of trouble so that you can eliminate financial shortfalls before they occur. All you need is a simple chart and the accounting reports for the year to keep track of the trend. In a financially healthy utility, the trend in the operating ratio should be steady or upward. If it is over the minimum value required to pay all the bills and is holding steady, the utility is probably financially healthy. If the ratio is below the minimum value or falling, you will need to do something to get it back in shape. This is an example of using the trend in the operating ratio to avoid problems and to stay financially healthy. The operating ratio is a good indicator of where your financial condition is headed. Think of it as the pulse of your system.

Maintaining, operating and managing your system for the long term is as important as choosing the right system for your community. With diligent attention to the factors discussed above, your community's system will serve you well for many years.