Pipeline

Winter 1997
Vol. 8, No. 1

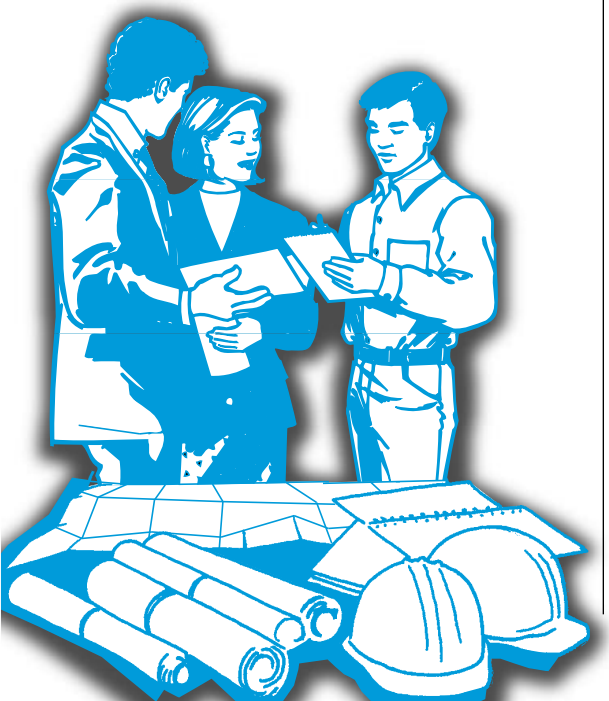
Small Community Wastewater Issues Explained to the Public

Choose the Right Consultant for Your Wastewater Project

Choosing a consultant to help plan, design, and oversee a wastewater project is an important decision for any community. The success of the project will depend, in large part, on the knowledge, experience, and ability of the person or firm the community hires.

Finding the right people with the appropriate qualifications and experience, therefore, is an extremely important task. But for many small communities, the selection process can be difficult. Small communities often do not have their own consultants, engineers, or other technical professionals on staff, and local officials and others responsible for planning the project may have little or no experience hiring or working with consultants.

This lack of experience can make it difficult for communities to know exactly where to look or what to look for when hiring a consultant. Communities planning a wastewater project may want to keep the following points in mind.



Consultants Are Not All the Same

Like doctors, lawyers, and other professionals, consultants bring a variety of personal talents and interests to their work, as well as different training, experience, and expertise. Consultants for wastewater projects may have training in engineering, soil science, geology, or other fields.

And while it is important for engineers to be professionally registered, this alone does not guarantee that they have the knowledge and experience needed to do a good job on your community's project.

Communities should hire consultants based on a variety of factors, including their experience and success in working with other small communities on similar projects.

Remember—It's Your Project

Community leaders sometimes feel uncomfortable or unqualified taking charge of the planning and decision-making process for their own wastewater projects. Again, much like the relationship many people have with their doctors or lawyers, communities tend to let the consultant be responsible for all important decisions affecting the project.

This type of arrangement sometimes can be disastrous for small communities. While communities should be able to rely on the consultant's technical expertise and ability to manage the project, unless communities identify their needs and make them known from the beginning, they could end up with systems that are too costly, complicated, or, in general, poorly designed to fit their needs.

To repeat an often-used analogy, planning a wastewater project is like buying a car. You wouldn't go shopping without first knowing something about what you want, what you can afford, and the options available. You also wouldn't ask a perfect stranger to pick out a car for you and expect to be satisfied. Communities need to choose consultants who are willing to work with them to achieve their goals.

There are several agencies and organizations that can help small communities with hiring a consultant. Some assist by providing information, while others provide technical assistance and/or funding. There also may be people in the community who can help with the selection process. Communities should take advantage of the help that is available.

Take Your Time

Screening proposals, interviewing candidates, checking references, and involving the public in the process are time-consuming tasks—but they are all necessary for conducting a successful search. Any extra time spent carefully choosing a consultant can be justified when you consider that most wastewater treatment systems are designed to serve a community for 20 to 30 years or longer. Your community will be living with (and paying for) the results of the project and the consultant's work for many years to come.

This issue of *Pipeline* offers suggestions and information for small communities planning to hire a wastewater consultant. Only some of the possible strategies communities may use to hire consultants are presented here. Topics include sending requests for proposals (RFPs), conducting interviews, and negotiating contracts.

Articles in *Pipeline* can be reprinted in local newspapers or included in flyers, newsletters, and presentations. Please send us a copy of the reprinted article for our files.

If you have questions about any of the topics discussed in this issue, contact the National Small Flows Clearinghouse at (800) 624-8301 or (304) 293-4191.

What Communities Should Do *Before* Hiring a Consultant

Unfortunately, it is not uncommon for a small community to have had a less than ideal working relationship with a wastewater consultant. While most consultants do good work and are very well qualified, it is extremely important that they have experience with small community wastewater projects. Too many small communities have systems that are too expensive or unnecessarily complicated to operate and maintain.

Communities can avoid these types of problems by soliciting help and guidance from state and local agencies and other organizations that assist small communities with wastewater projects. (See page 7 for a list of contacts that provide information and assistance to small communities.) In addition, there are several things that communities can do before beginning the search for a consultant to make the process easier.

Choose a Selection Committee

Typically, a selection committee is composed of about five people from the community who are committed to the project. If possible, it should include a variety of people with relevant experience who can contribute technical knowledge or other expertise.

For example, a selection committee might include a local official or community leader who has experience hiring consultants or with similar community projects, a treatment plant operator, and people from the community who have relevant experience or training. The community should be careful, however, to avoid choosing anyone to serve on the selection committee who cannot be objective or who may appear to have a conflict of interest.

Gather Information

The first task for selection committee members is to educate themselves about their community and their options for wastewater treatment. The committee should collect and review any records, past engineering reports, feasibility studies, or previous system designs that may be available. Sometimes, part of the work for the project has already been done, and communities can save money if they know what information already exists. Communities also should become familiar with local and state regulations. (See *Know the Rules* on page 3.)

Other important information to collect may include maps, the results of past sanitary surveys, population statistics, soil data, permit records, community planning documents, budgets, and other financial information relevant to the project.

It is also important to collect information and feedback from technical staff, such as county engineers or treatment plant operators, and from the public. The public should be involved and informed throughout the project through radio announcements, newspaper articles, and public meetings. (See page 6 for more about involving the public in the project.) Information from the public also can be obtained by conducting door-to-door or mail-in surveys.

Consultants will make certain assumptions about the community and its current and future wastewater treatment needs based on information from some of these same sources. The committee must educate itself about the community's needs to be able to properly evaluate the consultant's ideas for the project. In addition, the committee should learn about the various wastewater treatment technologies appropriate for small communities and try to acquire at least a general understanding of these alternatives.

It is also extremely helpful to contact other small communities to get information about their wastewater projects. They may offer insights or advice about mistakes to avoid or ways to improve the selection process.

Finally, state regulators and local health departments can offer assistance and information about the community and appropriate wastewater treatment technologies. The committee should work with these officials and keep them updated on the project's progress.

Consider Cost

Before soliciting proposals, communities need to have some idea about what they can afford and how they can pay for the different costs associated with wastewater treatment. These costs may include administrative and accounting costs, system operation and maintenance costs, and operators' salaries. Communities should investigate funding options and issues, such as municipal bonds, user rate structures, and debt repayment, in advance and have some possible payment strategies in mind.

If a community knows it may try to get funding from sources such as the Rural Utilities Service (RUS), the Community Development Block Grant program, or agencies administering other state or federal financing programs, it is a good idea to contact them *before* soliciting proposals from consultants. These agencies may have specific requirements for the project. (See page 7 for more about these organizations.)

Agree on the Consultant's Role

After studying all of the information available, the committee should agree on and compose a detailed description of the community's wastewater problem and any future goals or needs, such as anticipated expansion or development in the community. Once the problem is defined and described, then the committee should decide exactly what services the consultant will be expected to provide. (See the *Q&A* on page 3 for a list of some services performed by consultants.)

Deciding the consultant's role in advance will help the committee to develop the "scope of work" statement to be included in the request for qualifications (RFQ) and the request for proposals (RFP). It also will help the committee to evaluate the consultants' proposals as they are received.

The committee should write down everything it wants the consultant to do for the project. It is a good idea to discuss as many details about the project as possible at this time. For example, how will the public be involved in the project? Will the consultant eventually be required to propose more than one possible solution to the problem? Will the consultant be required to make presentations at public meetings? Can volunteers from the community perform some of the work on the project to save money?

By examining, discussing, and reaching agreement on as many aspects of the project as possible, the committee will have an easier task when it comes time to select a consultant.

For more about involving volunteers in the project, contact your local health department or water quality agency to learn about self-help programs in your state, or contact the Small Towns Environment Program (STEP). STEP is among the sources that provided information for this newsletter. For more about STEP, refer to the listing on page 7.

How To Begin Your Search

You've defined your problem, studied your options, and you know exactly what services you want your consultant or team of consultants to provide for your wastewater project. Now, how do you go about finding the right people for the job?

First, your community needs to get the word out about the project to those who have experience with small communities and wastewater projects. Next, you invite qualified independent consultants and/or consulting firms to submit proposals for their services. How you do this will depend on your state and local regulations and whether you plan to apply for funding from state or federal financing programs or other funding organizations.

Know the Rules

Funding agencies often have specific application guidelines and other requirements, some of which concern soliciting proposals from engineers/consultants and other aspects of the selection process. The Community Development Block Grant program, for example, has very specific guidelines that vary from state to state. Contact funding agencies early on to learn their requirements and to avoid jeopardizing possible funding sources for the project.

Also, be aware of state and local regulations concerning the hiring of consultants. For example, in addition to contacting consultants directly, your community may be required to advertise its search for services in newspapers and other public forums to ensure that a wide range of candidates will have the opportunity to be considered.

It is important to be familiar with the regulations and funding agency requirements for every phase of the project. For example, state regulations may require that a professional engineer sign off on the actual design of the project. And, to be eligible for funding for the consultant's work on the project, communities often need to get approval from funding agencies *before* the work has begun.

RFQs and RFPs

Whether law requires it or not, many communities choose to publicly announce their searches by advertising requests for qualifications (RFQs) and/or requests for proposals (RFPs) in newspapers, journals, and other public forums. Communities also send RFQs and RFPs directly to local firms that have experience with small community wastewater projects.

RFQs

An RFQ is usually a relatively short document inviting consultants to submit information about their qualifications. Communities use the responses to the RFQs to generate a list of firms that will then be invited to submit proposals.

The RFQ includes a statement of the general scope of work for the project and the name and address of a contact person from the selection committee. The RFQ also includes a questionnaire, form, or list of information to be provided by the individual or firm. These items are often mailed separately upon request to reduce the cost of advertising them in newspapers and journals. Communities usually request such information as the number of years in business, the type of services offered, the qualifications of key technical personnel, and details of other projects, past and present.

Many communities, organizations, and government agencies find it most convenient to use U.S. government forms SF-254 and SF-255 with their RFQs. These standardized forms make it easy to compare the consultants' responses. (These forms are available through the General Services Administration office at 1-817-978-2051.)

Firms usually respond to RFQs by sending a letter, brochure, or informational package. Many federal, state, and local agencies maintain files of RFQ responses and other information from different consultants and firms serving their area. Communities can sometimes save a lot of time and effort by calling their state regulatory agency and requesting access to these files.

RFPs

Requests for proposals (RFPs) are usually longer and more detailed than RFQs, and they give enough information about the project so that consultants can develop preliminary proposals for their services and how they will manage the project.

RFPs are sometimes sent to a select group of consultants or firms chosen from responses to the RFQs. However, communities often

Continued on page 4

What Services Do Consultants Provide?

Consultants can perform a wide variety of services for communities and often work together in teams. Consulting firms may assign a team of engineers, soil scientists, geologists, and others to a project. Consultants or consulting teams are often hired to perform some or all of the following services:

- ❑ examine the feasibility of various approaches and wastewater technologies available for solving the problem, taking into account the community's budget, current and future needs, local geographic conditions, and other social and environmental factors;
- ❑ propose the most appropriate and cost-effective solution or combination of solutions;
- ❑ prepare a detailed cost estimate of the proposed project;
- ❑ help educate or involve the public in the project and the decision-making process;
- ❑ design the system(s);
- ❑ help the community obtain funding or financing;
- ❑ help with the bidding and selection process for construction services;
- ❑ oversee and supervise construction;
- ❑ help hire and/or train operators for the system;
- ❑ develop an operation and maintenance strategy or program for the system; and/or
- ❑ be available to the community after the project is completed to work through any design flaws or to assist with other unforeseen difficulties that may arise with the operation of the system.

What Should An RFP Include?

Communities should provide the following information in the RFP:

- ❑ **the name, address, and phone number of a contact person for the project and place to send proposals;**
- ❑ **the number of copies required (one for each member of the selection committee);**
- ❑ **a deadline for proposals;**
- ❑ **a detailed description of the scope of the project;**
- ❑ **the services the consultant will be expected to provide;**
- ❑ **the community's goals for the project;**
- ❑ **the size of the community by number of households or residents;**
- ❑ **the allocated costs and potential sources of funding for the project; and**
- ❑ **a summary of the qualities and qualifications the community considers desirable for the consultant, project team, and/or firm.**

Communities often request that consultants include the following type of information in their proposals:

- ❑ **qualifications and resumes for the personnel to be assigned to the project;**
- ❑ **financial status of the firm;**
- ❑ **prior experience with this type of project and experience working with small communities;**
- ❑ **prior experience helping communities obtain funding and working with funding organizations;**
- ❑ **description and references from these projects;**
- ❑ **the consultant's or firm's present workload and availability, including references from recent projects;**
- ❑ **the consultant's plan and a proposed timetable for managing and performing the required services; and**
- ❑ **in some cases, proposed fees for services. *(See the discussion "Qualifications Versus Price" on page 5 regarding whether to allow bidding for consultants' services.)***

How To Begin Your Search

Continued from page 3

skip issuing RFQs altogether, and choose to send out the RFPs directly or advertise their availability in newspapers and journals. Again, the choices communities have for soliciting consulting services will depend on local regulations and funding agency requirements.

Developing Effective RFPs

The quality of the proposals the community receives will be greatly influenced by the detail and quality of the information provided in the RFP.

For example, the statement of the scope of work for the project should be well developed and specific. It should include a detailed description of the community and its residents, a thorough explanation of the current wastewater problem and the problem's history, and any ideas, goals, requirements, or aspirations the community has for the project.

A community's goals may include finding the most cost-effective, reliable, and practical solution(s) to the wastewater problem that would cost less than a given amount per year per resident. A community may emphasize that it only wants to consider systems that use proven technologies that are easy and economical to operate and maintain. Or, the community may require that service and technical support for any equipment specified for the systems be available locally at a reasonable price. Including details like these in the RFP may help communities receive proposals from consultants willing to address practical solutions to the problem.

The RFP also should include exactly what consulting services the community expects, as well as what sort of working relationship is desirable and the qualities or abilities the consultant should bring to the project.

The RFP should mention any information that could help the consultants develop their proposals (for example, the information gathered by the selection committee listed on page 2). Maps, plans, and other materials can be put on display in a public place where the consultant candidates can view them, or, if practical, information packets could be mailed to individuals upon request.

It is also sometimes helpful to schedule a preproposal informational meeting and include the time and place in the RFP. The meeting would give the consultants an opportunity to ask questions about the project and perhaps visit potential sites.

Finally, it is important to list any specific information you want the consultants to include in their proposals and emphasize the format or structure you would like proposals to follow. (Refer to the list at left for possible items to include in an RFP.) It is also very important to decide in advance the specific criteria and rating structure the selection committee will use to evaluate the proposals and include this information in the RFP. (See page 5 for more about evaluating proposals.)

For example, it would be helpful for consultants to know that the selection committee will place a lot of weight on factors like their willingness to investigate alternative technologies, attend public meetings, or offer assistance with future operation and maintenance.

Receiving proposals similar in format makes the screening process much easier, and providing the selection criteria in the RFP tends to improve the overall quality of the proposals.

NSFC Databases Can Assist Communities

Small communities planning wastewater projects should take advantage of some valuable resources at the National Small Flows Clearinghouse (NSFC).

The NSFC's Manufacturers and Consultants Database can provide communities with the names and addresses of consultants and system manufacturers. Searches can be customized by location and by specialty.

For example, nationwide, the database currently lists 98 consultants specializing in community wastewater planning, 93 in subdivision system design, and 337 in wastewater system management. Each listing includes a brief summary of the services offered. Searches can be further narrowed only to include listings for a particular area.

Communities also can find case studies from other small communities through a customized search of the NSFC's Bibliographic Database. The NSFC keeps a list of contacts and referrals that can guide callers to other organizations that provide technical support, funding information, or other assistance.

For more information about these resources or to order a customized search of any of the NSFC's databases, call (800) 624-8301 or (304) 293-4191 and ask to speak with a technical assistance specialist.

Screening Proposals and Interviewing Candidates

As the due date for proposals approaches, it is time for members of the selection committee to develop a strategy for screening the proposals, narrowing the list, and setting up interviews with the final candidates.

To ensure fairness, it is very important that the committee use some type of uniform system for evaluating the proposals. This also makes it easier for the committee to compare "apples to apples" when reading the submissions. To evaluate the proposals, the committee should develop a rating structure and a list of questions based on the selection criteria provided in the request for proposals (RFP).

For example, a chart that includes the criteria outlined in the RFP could be prepared so that committee members can keep a copy in front of them when rating proposals. The criteria could all be weighted equally, giving each item the same range of possible points (for example, one to five), or some questions could be weighted more heavily to receive more points. At the end, the committee can compare the totals for each proposal.

Whatever method is used, a written record of the evaluation process should be kept in case any questions arise in the future concerning the committee's decisions.

Choose Finalists

When the evaluation process has been completed, the committee should narrow the selection to approximately three to five final choices, depending on the size of the project. Choosing more than five can make the process unnecessarily cumbersome for everyone because of the time involved in interviewing candidates, checking references, and preparing presentations.

Check References Carefully!

The best way to learn about the strengths and weaknesses of each candidate is to interview their references from recent and ongoing projects. Surprisingly, communities often don't put enough emphasis on this part of the screening process.

It is a good idea to develop a set of questions to ask each reference. This way, the task can be shared among the members of the committee, and the comments can be easily compared.

Committee members should ask the references specific questions concerning the project the consultant worked on and whether there were any problems with the project, the design, or the consultant's performance. The committee also should ask if the consultant's proposal, timetable, and cost estimates for the project were accurate, and if there were any expensive changes or deviations from the original proposal. The committee also should inquire if the community had a good working relationship with the consultant, and if he or she was easy to contact and available when needed.

Some suggest even visiting the referenced communities and projects in person, so that the committee has the opportunity to see the system and ask questions of operators and others involved in the project and the system's operation and maintenance.

Finally, it is important for the committee to ask the consultants for references from their recently completed projects (for example, references from all small community projects completed in the last two years). Naturally, consultants will tend to recommend only those references that are most favorable.

Schedule Interviews

After reviewing the information gathered from the references, the selection committee should contact the consultants to schedule interviews.

It is important to insist that the consultants who actually will be assigned to the project be present at the interview so the committee has an opportunity to meet them and ask them questions. The consultants' responsiveness and ability to answer questions and explain the technical aspects of the project are all extremely important considerations.

The selection committee should use a similar strategy as with the other stages of the screening process and prepare a uniform rating system or list of questions for evaluating each presentation. Committee members should take notes during the presentation and feel free to ask questions about anything they don't understand.

At this point, the committee may want to invite others who have an interest in the project or relevant experience to

Continued on page 6

Qualifications Versus Price

Should communities request consultants to submit their fees in the proposal stage? There is some debate as to whether this is a good idea.

The federal government and many state and government agencies use a qualifications-based selection (QBS) process, which is advocated by many engineering associations.

With the QBS method, criteria such as skill, reputation, relevant experience, and availability are the basis for selection. There is no bidding for consulting services. Fee information is not included at all in the proposals and is not a consideration during the initial screening and selection process. Price only becomes a factor after the initial screening of proposals or during contract negotiations.

According to advocates of QBS, the main advantage of this method is that it helps ensure that consultants will do a thorough job in the important planning and design phases of the project.

For example, if a consultant bids too low to win a project, it is less likely that he or she will be able to afford to thoroughly investigate the feasibility of possible alternatives for the community. The consultant, therefore, may overlook alternatives that could mean significant savings for the community over the life of the project.

However, with today's tight budgets and fewer public funds available to small communities, many small communities feel it is necessary to consider price when selecting a consultant. While price is often a factor, most sources agree that it shouldn't be the single most important consideration when hiring a consultant.

INTERVIEWING TIPS

In its publication, *A Guide to Qualification-Based Selection of Design Professionals: A Key to Quality,* the American Consulting Engineers Council (ACEC) offers several suggestions for conducting an effective interview, including the following:

- ❑ The physical set-up for the interview should be comfortable, with good acoustics and ample room.
- ❑ All interviews should be scheduled on the same day, if possible. This permits the committee to compare all of the interviewed firms while information is fresh in their minds, and ensures consistent interview scoring.
- ❑ A separate waiting room should be provided for other firms to be interviewed.
- ❑ Adequate time should be scheduled for each presentation, usually 45 minutes, which allows five minutes for introductions and preliminary remarks by the interview chair, 20 minutes for the presentation of qualifications, 15 minutes for questions and answers, and five minutes for a closing summary by the consultant.

Communities may want to allocate extra time between interviews to allow for more questions, discussion among committee members, and equipment set-up time.

To purchase A Guide to Qualifications-Based Selection of Design Professionals: A Key to Quality, *contact ACEC at (202) 347-7474, 1015 15th Street, N.W., Washington, DC 20005, and request publication #354. The price is $10 plus $3 shipping and handling.*

Negotiating A Contract

When the screening and interviewing process is over, the selection committee should be able to identify a top candidate and the ranked order of the remaining runners up.

Now it's time to try to negotiate an agreement with the top candidate and develop a written contract. Sometimes consultants will offer their own contracts, but it is usually better for the community to work with the consultant to adapt the contract or to develop an original contract. It would be prudent for communities to hire a lawyer to assist with negotiations and with writing the contract.

The contract should include a detailed description about the scope of work and all of the tasks for the project, a timeline for the project and schedule for reports and meetings, personnel and management responsibilities, the total cost for the consultant's fees, and the method of payment and payment schedule.

Because there are so many details to work out, the parties sometimes will be unable to reach an agreement. If this happens, the community will need to examine its options.

Negotiating Price

Two issues that can make reaching an agreement difficult are the consultant's fees and the method of payment.

The consultant will base his or her fee estimate on anticipated direct costs for labor and expenses, plus overhead and profit. Many engineering associations and the Rural Utilities Service (RUS) offer information on standard fees for consulting services. (See page 7 for information about RUS.) Communities may want to acquire a fee schedule for their state to use as a general guideline and to compare with the consultant's proposal.

There are several possible ways to pay for engineering services. Usually the most advantageous method for communities is to agree up front on a lump sum or total cost (also referred to as the fixed fee method). This method of payment is practical when the scope of work for the project is well defined. The payment schedule also should be decided in advance and should be tied to the completion of specific tasks, as opposed to scheduled payment dates.

Over the course of the project, any services that the consultant needs to perform in addition to those detailed in the contract could be compensated at a previously determined hourly rate, but only if both parties approve of the work to be done in advance.

Another method of payment that is commonly used is to base the consultant's fee on a percentage of the total cost of the project. Some funding agencies, for example, use a curve that determines the consultant's fees relative to the total cost of the project. While basing consulting fees on project costs is an accepted payment method, it sometimes leaves the consultant little incentive for saving money on the project. Communities should be aware of this and should check references carefully to make sure the consultant's projects tend to stay within budget.

Screening Proposals and Interviewing Candidates

Continued from page 5

participate in the final screening process. For example, if the community hasn't already enlisted the help of an organization such as the Rural Community Assistance Program or other assistance provider (see the contacts list on page 7), it may be helpful to invite a representative from one of these organizations to sit in on the interviews and ask questions.

Involve the Public

The success of the project may depend on public acceptance of such issues as alternative wastewater treatment technologies, higher user rates, and municipal bonds, so it is important to involve the public as much as possible, from start to finish, in the project and the decision-making process.

Some communities choose to invite the consultants to give their presentations at public meetings. This is an excellent way to involve and inform the public and build support for the project. In any case, let the candidates know in advance the type of meeting and the number of people expected.

At the end of the interview process, the selection committee should meet to compare responses and go over the impressions, questions, and concerns of each committee member and the public.

Two Small Communities Join Forces for Wastewater Project

In rural Bedford County, Pennsylvania, a very ambitious demonstration project is currently being planned. Two small communities, Coaldale Borough and Broad Top Township, have combined efforts to improve local water quality and provide affordable wastewater treatment to as many residents as possible.

In 1990, leaders from both communities met to discuss their options for sewage treatment. "We knew we had a problem," said Jack Decker, a supervisor for Broad Top Township. "The coal mining industry used to be big in this area, so there is mine drainage in local streams. In addition, most residents have either inadequate wastewater treatment or none at all."

According to Decker, nearly half of the onsite systems in the area discharge directly into streams and storm drains, and most residents can smell raw sewage in the summer.

Community leaders blame the poor local water quality for the lack of economic growth in the area, so they formed a sewage advisory committee of citizens sincerely interested in doing something about the problem. The group started with 12 to 15 members, but is now solid at 10 members, and includes a variety of people with different backgrounds: local homemakers, a school teacher, construction workers, a logger, a retired state policeman, and others from the two communities.

With help from a variety of sources, the committee developed a request for proposals (RFP) that was advertised in four newspapers and sent to any firm that requested it. The RFP also was sent to a list of firms the committee developed with information from their county planning commission, state department of environmental protection and the state conservation district.

"We included a score sheet in the RFP that listed the criteria we wanted the proposals to meet. The greatest emphasis was put on our goal of producing a system that would cost residents no more than $10 each per month to operate and maintain," said Decker. "We placed a lot of importance on finding a firm that was willing to work with the community to save money."

(It is important to note that this $10 figure is a goal and does not include construction costs and other capital expenses for the project, which are being funded through grants as part of a demonstration project with the U.S. Army Corps of Engineers.)

The community decided to hire an engineering firm from Doylestown, Pennsylvania, after Decker toured the sites of some projects the firm had worked on and talked with the operators of those systems.

"I've visited numerous sites throughout the selection process just to get as much information about the different systems as possible and the firms that worked on them," Decker said. "Then I went back and presented the information to the sewage advisory committee. Wastewater operators can tell you what the problems are with the system and if the firm has done a good job."

Decker has found hiring a consultant to be a very educational experience. "Before working on this project, I was very unfamiliar with wastewater collection and treatment," he said. "Now, I've developed working relationships with different government agencies, participated in workshops, and attended meetings regarding wastewater. Finding money to fund the project was also very challenging."

Construction on the project is scheduled to begin in the spring of 1997. The project will include individual onsite systems and five community systems using several wastewater treatment technologies, including lagoons with sand filters, and community septic tanks with subsurface discharge or with sand filters and surface water discharge.

So far, the committee is happy with its choice of consultants. They have been willing to work toward the communities' goals, and their work has been pretty much on time and within budget.

Decker offers this advice to communities planning to hire a consultant: "Remember that the consultant works for you, and that you are paying them. So, make sure you do your homework, have a plan, stick to it, and don't be afraid to make decisions. Take charge and get what you want for the project, but also be willing to listen to good advice for those areas in which you lack knowledge."

Remember To Ask For Help

In addition to local health departments and state regulatory agencies, below are just a few of the other organizations that can provide assistance to small communities:

The National Small Flows Clearinghouse (NSFC)

The NSFC offers a variety of information, assistance, and free and low-cost products for communities planning wastewater projects. Contact the NSFC at (800) 624-8301 or (304) 293-4191 for more information about any of the organizations listed below.

Rural Community Assistance Program (RCAP)

This network of nonprofit organizations can provide assistance to rural and low-income communities with almost every aspect of planning a wastewater treatment project. Call their national office at (703) 771-8636 or the NSFC for more information.

Extension Service Offices

Many universities have U.S. Department of Agriculture (USDA) extension service offices that help small communities with project planning and provide information about wastewater treatment technologies. Contact the USDA at (202) 720-3377 or the NSFC for more information.

Small Towns Environment Program (STEP)

STEP is a partnership of The Rensselaerville Institute, the U.S. Environmental Protection Agency, and the Ford Foundation and helps communities develop self-help programs to save money on projects. Call STEP at (518) 797-3783 or the NSFC for more information.

Rural Utilities Service (RUS)

RUS is a major source of funding for rural and small community drinking water and wastewater projects. Its water and wastewater loans and grants are administered through Rural Development offices (formerly Farmers Home Administration) in each state. Contact the NSFC for the number of your local RUS office.

National Rural Water Association (NRWA)

NRWA is a nonprofit association organized to represent small water and wastewater utilities in each state and to meet their needs with operation, maintenance, management, funding, and political concerns. It offers a variety of assistance and services. Contact the NSFC for the number of your state office.

Community Development Block Grants (CDBG)

This federally funded program is administered through the states and provides grants for housing, economic development, and public facilities. Contact the NSFC for more information.

FOR ADDITIONAL INFORMATION

To order products listed as available from the National Small Flows Clearinghouse (NSFC), call (800) 624-8301 or (304) 293-4191, E-mail www.nsfc_orders@wvu.edu, or write NSFC, West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064. Request each item by number and title. A shipping and handling charge will apply.

It's Your Choice

This 77-page book, available from the NSFC, is published by the U.S. Environmental Protection Agency and describes the choices small communities have for solving their wastewater treatment problems and addressing their future needs. It examines the steps necessary for defining the problem, selecting a consultant, and financing the system. The price is $7.50. Item #FMBKGN01.

Wastewater Treatment/Disposal for Small Communities

This 118-page manual available from the NSFC is designed to guide planners and designers through the required steps for developing small community wastewater systems. It highlights the specific characteristics of system design and management functions that lead to successful implementation of the selected system. It includes an excellent general description of the alternative treatment technologies available for small communities. The price is $16.50. Item #WWBKDM70.

Water Sense Offers Series on Bonds

Water Sense, a free newsletter published by the National Drinking Water Clearinghouse (NDWC), an NSFC sister organization, helps small communities learn about different ways to finance their water and wastewater projects. The newsletter offers specific information about funding and financing resources, legislation, cost-saving strategies, and innovative financing mechanisms. Current and upcoming issues will include a series on bonds, explaining the different types of bonds and how they are used to finance projects. Contact the NDWC at (800) 624-8301 or (304) 293-4191 to order a free subscription.

New Product Available from STEP

The Small Towns Environment Program (STEP) has prepared a new support paper, titled *On Selection of an Engineer . . . How To Find the Best Consultant for Small Water and Wastewater Projects*. Drawing on their own experience and the insights of state officials and community leaders from around the country, this paper provides guidance on finding and hiring the best consultant. The document is conveniently arranged in a notebook format and includes topics such as tailoring a request for proposals to the needs of a self-help project, interviewing candidates, assessing finalists, and negotiating a contract. The price is $15. Contact STEP at (518) 797-3783 to order or for more information.

Poster Describes Wastewater Systems

This foldout poster available from the NSFC, titled *Small Wastewater Systems: Alternative Systems for Small Communities and Rural Areas*, provides an overview of various alternative wastewater systems for small communities. The price is $1. Item #WWBLPE02.

PIPELINE

Pipeline is published quarterly by the National Small Flows Clearinghouse at West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064. http://www.nsfc.wvu.edu

***Pipeline* is sponsored by:**
U.S. Environmental Protection Agency
Washington, D.C.
Steve Hogye—*Project Officer*
Municipal Support Division
Office of Wastewater Management

National Small Flows Clearinghouse
West Virginia University
Morgantown, WV
Peter Casey—*Program Coordinator*
Jill Ross—*Publications Supervisor*
Special Technical Advisors—
Tamara Vandivort and Patricia Miller, Ph.D.
Cathleen Falvey—*Editor*
Daniel Gloyd—*Graphic Designer*

ISSN: 1060-0043
PIPELINE *is funded by the United States Environmental Protection Agency. The contents of this newsletter do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.*
Printed on recycled paper

For Wastewater Information, Call the NSFC at (800) 624-8301 or (304) 293-4191.

National Small Flows Clearinghouse
West Virginia University
P.O. Box 6064
Morgantown, WV 26506-6064

ADDRESS CORRECTION REQUESTED

Nonprofit Organization
U.S. Postage Paid
Permit No. 34
Morgantown, WV