

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

IN RE:)	
)	
PETITION OF TENNESSEE)	DOCKET NO. 15-00025
WASTEWATER SYSTEMS, INC.)	
TO AMEND ITS CERTIFICATE)	
OF CONVENIENCE AND NECESSITY)	

TESTIMONY OF MARK LEE

Q. State your name, what you do for a living and a little about your experience regarding wastewater utilities.

A. My name is Mark P. Lee. I am a principal of the engineering firm, SEC, Inc., based in Murfreesboro, Tennessee, and have been a registered professional engineer for twenty-eight years. A copy of my curriculum vitae is attached as Exhibit A. In 2007, I served on the Technical Advisory Committee of The Tennessee Department of Environment and Conservation ("TDEC"). This group re-wrote TDEC's design guidelines for decentralized wastewater treatment in Tennessee. I have been designing wastewater treatment STEP (septic tank effluent pumping) systems since 1997. My services furnished in connection with these STEP systems include design, planning and project management. Our firm has designed STEP systems for over 5,000 residential lots. Our STEP systems design flows are approximately 150% of the actual flows, and these systems surpass state and municipal requirements regarding effluents. To date, we have never experienced a failure on any of our systems.

Q. What is your involvement with the proposed wastewater treatment system at the Enclave at Dove Lake?

A. Nolensville 162, LLC, a developer, retained our engineering firm to design the subdivision and STEP system proposed for the Enclave at Dove Lake development located in Nolensville, Williamson County, Tennessee. The system being proposed for this subdivision is an outstanding system, surpassing all state and county requirements concerning the system.

Q. What is the purpose of your testimony?

A. I am here to support the application of Tennessee Wastewater Systems, Inc. ("TWSI") to be the wastewater utility provider at the Enclave at Dove Lake and to respond to some of the arguments made in this docket by the Office of the Consumer Advocate and Protective Division.

Q. What is your overall assessment of the use of decentralized wastewater treatment systems?

A. As I said, our firm has designed STEP systems for over 5,000 residential customers. To date, we have never had a failure on any system designed by my engineering firm.

State officials at TDEC have told us that decentralized wastewater systems offer significant advantages across the board as compared to centralized systems. Attached to my testimony as Exhibit B is a letter to my engineering firm from Robert O'Dette who was, at the time he wrote the letter, Assistant Manager for Municipal Facilities at TDEC. He writes that developers, public and private utilities are increasingly choosing to use decentralized systems for both environmental and economic reasons. He states, "I do not know anyone in our department

who does not support . . . the use of decentralized WWTS" (wastewater treatment systems).

Letter at p. 5.

Q. Do you agree with Mr. O'Dette?

A. Yes. There is no question that the technology of a decentralized system, when correctly built and properly managed, is both more economical and environmentally safer than a centralized wastewater treatment system.

Q. What role has TWSI played in the development of decentralized wastewater systems in Tennessee?

A. In 1996, the Rutherford County Planning Commission realized land was being developed at an alarming rate due to the large lot sizes required by septic systems. They challenged design professionals to propose a solution. SEC, Inc. had an interest in pursuing a solution, so in 1997 we contacted Bob Pickney, at the time with Pickney Brothers and now with Adenus and TWSI. Bob shared with us a design Mike Hines, who was affiliated with Pickney Brothers, had worked on since the 1970's. Pickney Brothers, along with Hines, had been working to refine the concept, creating a more quantifiable design. Bob Pickney spent considerable time teaching us how to design collection, onsite treatment and dispersal systems using the evolving technology which we use today.

As technology has evolved, Adenus and TWSI have been on the cutting edge, and the design industry looks to them as they lead the way. Because of Bob Pickney and others at Adenus, TWSI is, in my opinion, a leading provider of decentralized wastewater treatment systems in this part of the country.

Q. Based on your experience with Bob Pickney, Adenus and TWSI, do you think that TWSI has the managerial and technical ability to provide wastewater service at the Enclave at Dove Lake?

A. TWSI is the oldest and the largest investor-owned provider of decentralized wastewater treatment services in Tennessee. They are also one of the best. In designing the treatment center at the Enclave at Dove Lake, I have to meet the standards and guidelines of the county and the state (TDEC). I also have to meet the standards of TWSI, which are higher than the standards of any of those regulatory bodies. Anyone familiar with this industry knows that TWSI has the managerial and technical ability to provide wastewater service at the Enclave at Dove Lake.

Q. Do you know why the developer of the Enclave at Dove Lake selected TWSI to provide wastewater service?

A. Yes. As shown in TWSI's application to the TRA, no utility district or municipal or county system was willing to provide wastewater service to this development. Therefore, the developer had to look for an investor-owned, decentralized provider of service. The developer chose TWSI, at our recommendation, and I believe it was the right choice.

Q. Is TWSI the cheapest provider of decentralized wastewater service that the developer could find?

A. I don't know but I doubt it. This is a very high-end development. The developer wanted a treatment system and a service provider that would be comparable in quality to the homes which will be built there. For that reason, he chose TWSI.

Q. You have designed the treatment system to TWSI's specifications. Does that mean that TWSI or one of its affiliates will construct the system?

A. No. TWSI does not require that TWSI or an affiliate build the system. Just as the developer selected SEC, Inc. to design the system, the developer is free to select any qualified firm to construct the system. I will suggest a few names to the developer who will then solicit bids. Rutherford Utility Company may very well end up being the builder. Whoever builds the system, however, must meet TWSI's standards which, as I have said, exceed the requirements and design guidelines of the County and State. TWSI will inspect the system every step of the way as it is built.

Q. Do you have any concluding remarks?

A. Yes. Both the seller and the developer of the Enclave at Dove Lake have filed affidavits in this docket explaining that this multi-million dollar development contract cannot close until all necessary approvals are obtained. In other words, this project cannot move forward until, among other things, TWSI receives a certificate to provide wastewater service to this area. As I have said, TWSI is a well-known provider of decentralized wastewater services in Tennessee. It is my understanding that the TRA has granted TWSI's application to provide service at over 120 developments in Tennessee and that TWSI is currently providing service at over 70 sites. No one knowledgeable about this industry could reasonably question TWSI's qualifications to provide this service. I would urge the TRA to approve this application at the conclusion of this hearing.

Q. Does this conclude your testimony?

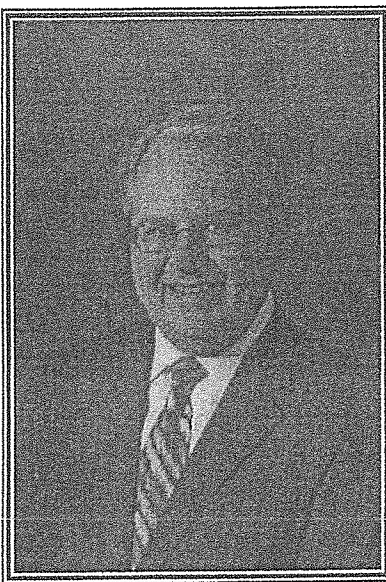
A. Yes.

EXHIBIT A

Civil Engineer

Expert Witness

Curriculum Vitae



Mark P. Lee, P.E.
SEC, Inc.
850 Middle Tennessee Blvd.
Murfreesboro, TN 37129
Office 615-890-7901

SEC, Inc.

SITE ENGINEERING CONSULTANTS

ENGINEERING • SURVEYING • LAND PLANNING
LANDSCAPE ARCHITECTURE

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Mark P. Lee, P.E.

New Business & Engineering Development, Principal

SEC, Inc.

850 Middle Tennessee Blvd.

Murfreesboro, TN 37129

EDUCATION

Bachelor of Science in Civil Engineering
Tennessee Technological University - 1983

REGISTRATION

Registered Professional Engineer in:
Tennessee (No. 19,186), Alabama (32668), Kentucky (15,162), Illinois (062-046793, inactive), Mississippi (13292), and Texas (76937).
National Association of Sewer Service Companies, Inc. (NASSCO) Certified for Pipeline, Manhole and Lateral Assessment (U-1212-16846)

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers (ASCE), Member
Transportation and Development Institute of ASCE, Member
Tennessee Wastewater Industry Group, Treasurer

TEACHING / SPEAKING EXPERIENCE

High Water Too Close to Home – 2002, Rutherford County Television
Site Engineering and Stormwater Management – one to two times each year,
1999 - Present, Middle Tennessee State University, Construction
Management program
MTSU Video Presentation for Construction and Materials I – *Surveying and Civil
Engineering Involvement in Single-Family Residential Developments* – 2003

EXPERIENCE

1989 - Present Site Engineering Consultants, Inc., Murfreesboro, TN
Engineers, Surveyors & Land Planners
New Business & Engineering Development, Principal

Mr. Lee provides project management, planning, design and coordination of various types of projects. Specific civil engineering experience exists in the areas of site planning, site grading and drainage designs, hydrology and hydraulic analysis and design for stormwater, floodplain modeling for bridge replacement designs, detention/retention pond designs, water and sewer utility design, land planning, residential subdivisions, and roadway construction plans and specifications. Site design projects cover aviation, commercial/retail, correctional, distribution/logistics, educational, financial, healthcare, hotel/motel, industrial, mental healthcare, municipal, office, and residential multi- and single-family sites. Mr. Lee is responsible for reviewing work of 4 other engineers; their designs and calculations, assuring quality control, constructability and compliance with local, state and federal standards.

SEC, Inc.

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1984-1989 Great Western Coal of Kentucky
Engineer Responsible for Core Drilling and Mine Reclamation

Mr. Lee was responsible for core drilling and mine reclamation operations at the Bell County, KY operation. He also designed mining plans for both Bell and Harlan County surface and underground coal mining operations, which included hollow fills, mountain top and auger removal. The design of those operations included haul roads, hydrology and hydraulic calculations for the design of detention/sediment ponds, and reclamation of mining activities. Mr. Lee also surveyed both surface and underground operations.

1983-1984 Miller-Wihry-Lee, Inc., Nashville, TN
Landscape Architects, Engineers & Surveyors
Design Engineer

Mr. Lee designed residential subdivisions and multi-family residential developments. He was responsible for site, grading and drainage, and water and sewer utility designs. He assisted in land surveying for the design and construction portions of the project.

MAJOR PROJECTS:

Amazon Fulfillment Center, Murfreesboro, TN
Berkshire Subdivision, Murfreesboro, TN
Bowie Commons (Publix), Fairview, TN
Embassy Suites Hotel & Conference Center,
Murfreesboro, TN
Federal Bureau of Prisons High, Medium & Low
Security Compounds, Beaumont, TX
Gateway Village, Murfreesboro, TN
(Live-Work, LEED)
Itawamba Community College (6 Sites), Fulton
& Tupelo, MS
MidSouth Bank (3 Sites), Murfreesboro &
Smyrna, TN
Mississippi Psychiatric Hospital (3 Sites),
Meridian, Tupelo & Oxford, MS
Murfreesboro Medical Clinic PH. 1 & 2,
Murfreesboro, TN
Rutherford County Chamber of Commerce,
Murfreesboro, TN
Stone Gate Corporate Center Buildings 1, 2 & 4,
Murfreesboro, TN
The Village sorority housing, University of
Southern Mississippi, Hattiesburg, MS
Water Stone Executive Buildings 8 & 9,
Murfreesboro, TN
Clean Water Nashville - Cowan/Riverside Area 1
PACP & QA/QC
Nashville, TN
Middle Tennessee Blvd. Ph. 1 & 3 Designs
Set horizontal and Vertical alignments
Murfreesboro, TN

Fortress & Manson Pike Roadway & Intersection
Designs, set horizontal and vertical
alignments
Murfreesboro, TN

ACTIVITIES

Leadership Rutherford, Class of 1996
Leadership Rutherford Board of Directors,
1997-2000, Secretary/Treasurer 1998-2000
Rutherford County Strategic Plan, 1995-1996
Rutherford County Infrastructure Committee,
2001
Rutherford County Subdivision Regulation
Review Committee, 1996 - 1997 & 2007
Rutherford County Zoning Resolution Review
Committee, 1998 - 1999
Blackman Land Use Study Committee, 2000
MTSU - Construction Management Advisory
Committee, 2000 - Present
TDEC Technical Advisory Committee Chapters
15 & 17 for Wastewater Treatment - 2007
Rutherford County Comprehensive Plan
Steering Committee, 2009 - 2012
Rutherford County Habitat for Humanity
Board of Directors, 2009 - Present, 2011 VP
Leadership Middle Tennessee, Class of 2012

C.V. of Mark P. Lee, P.E.

February 27, 2015
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SPECIAL TRAINING

Hydrologic & Hydraulic Design of Highway
Culverts
Municipal Storm Water Management
Residential Land Development Practices
Stormwater Management - Solutions and
Regulations
Fire Protection Systems, Standard of Care

Engineering Ethics - Public Safety, Health &
Welfare
Hydraulics of Small Wastewater Systems
Permeable Paver Systems - Design
Considerations
Regional Transit System Development
Bus Rapid Transit II & III
Retaining Wall Design
Concrete Parking Lot Design
Roller Compacted Concrete Design

PREVIOUS EXPERT TESTIMONY

- *Dr. Ray Miller, DVM (plaintiff, client) v. United States of America Stones River National Battlefield.* August 11, 1998 The US Government filed eminent domain and claimed the property's value was lessened since it had flood plain issues.
 - Mr. Lee provided testimony and evidence that the property had good development potential. Mr. Lee provided engineering study, exhibits, deposition, and in-court testimony for Client. The jury verdict was in favor of the plaintiff.
- *Vannatta Construction Company (plaintiff, Atty. Jody Lambert) v. Mark A. Pirtle (defendant, client, Atty. B. Timothy Pirtle)* Tried before Judge J.B. Cox, Bedford County Circuit Court, October 4, 2000, Shelbyville, TN. Vannatta Construction claimed they were under paid. Pirtle claimed Vannatta abandoned the construction project.
 - Mr. Lee provided expert in-court testimony supporting Pirtle's claim. Pirtle was awarded the verdict.
 - Tim Pirtle Law Office, 309 Post Road, McMinnville, TN 37110-2411

PREVIOUS EXPERT OPINION

- *Thomas & Associates, Inc. (plaintiff, client) v. R and M Contractors, Inc. and RW Armstrong, Inc. Defendants, and R and M Contractors, Inc. Third Party Plaintiff, v. Retaining Walls of Tennessee, Inc., Third-Party Defendant/Fourth-Party Plaintiff, v. RW Armstrong & Associates, Inc., Redi Engineering, Inc., Qore, Inc. d/b/a Qore Sciences, K.S. Ware & Associates, L.L.C., Thomas & Associates, Inc., S&ME, Inc. and Martinez Masonry, Inc., Fourth-Party Defendants.* Chancery Court for Davidson County (TN) No.: 09-2217-II. May 2011
 - Metro Nashville Airport Authority, BNA Airport Murfreesboro Road Employee Parking Lot, The project plans prepared by RW Armstrong & Associates (engineers) contained errors regarding the location of the modular block retaining wall. The wall was built according to the plans, after Thomas & Assoc. pointed out the error. The General Contractor directed them to construct it as shown, and then had them rebuild it correctly without additional compensation.
 - Provided professional assistance to Vic L. McConnell, Esq., reviewing design documents, shop drawings and photographs, and provided case exhibits. The case was dismissed against our client in Spring 2012.

- Vic L. McConnell, Esq., Smith Cashion & Orr, PLC, 231 Third Avenue North, Nashville, Tennessee 37201-1603
- *Robert and Courtney Thompson (plaintiffs, client) v. Kevin Mosley, individually and d/b/a K&K Construction, et al.; Kathryn Mosley; K&K Construction Enterprises, Inc. Civil Site Design Group, PLLC, Crawford And Cummings, P.C.; The Estate of Alfred Hodges; Pamela Hodges, individually; and US Bancorp, defendants. Kevin Mosley, individually and d/b/a K&K Construction; Kathryn Mosley; K&K Construction Enterprises, Inc., Third-Party Plaintiffs, v. Kenneth House and Wilson County, Tennessee. Wilson County (TN) Circuit Court Case No.: 2010-cv-584. July 2011*
 - House built in Quad Oak residential subdivision subjected to flooding from inadequate subdivision drainage infrastructure.
 - Provided reviews of engineering plans, depositions (contractor, civil engineers), regulations, ordinances, specifications, historic photographs, correspondence and contracts. Provided site visit and written expert report to John O. Belcher, Esq. Client received out-of-court settlement their favor.
 - John O. Belcher, Esq., Lassiter, Tidwell & Davis, PLLC, 150 Fourth Avenue North, Suite 1850, Nashville, TN 37219
- *Metro Police Department Credit Union 2711 Old Lebanon Rd Nashville, TN 37214 (client, William Helou, atty.) design-build oversight by the civil engineer, James + Associates, and the contractor, Wellspring Builders, Inc. This oversight caused the building to flood frequently after heavy rains. Additionally, the building's sewage would back up into the building frequently. June 2010.*
 - Mr. Lee provided site and sewer remediation design services with a written report. The contractor resolved these issues by following Mr. Lee's recommendations.
 - Mr. William N. Helou, Esq., MGLAW, PLLC, 2525 West End Avenue, Suite 1475, Nashville, Tennessee 37203
- Mr. Lee has provided attorneys with assistance, research and review for their cases.
- Mr. Lee has other ongoing cases he is involved in.

EXHIBIT B



TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER POLLUTION CONTROL
401 CHURCH STREET
6th FLOOR L & C ANNEX
NASHVILLE, TENNESSEE 37243

March 15, 2010

Jamie Reed, P.E., R.L.S.
Vice President
SEC, Inc.
850 Middle Tennessee Blvd.
Murfreesboro, TN 37129

RE: Decentralized Wastewater Treatment Systems versus "Big Pipe" Centralized Wastewater Treatment Systems.

Dear Mr. Reed:

Thank you for your letter dated March 10, 2010, with regard to the topic of decentralized wastewater treatment systems (WWTS) versus "Big Pipe" centralized WWTS. As you may know, I have almost 40 years of experience with WWTS and could not agree more that decentralized WWTS offer significant advantages across the board as compared to the centralized/regionalized WWTS.

We are seeing a shift in the old way of thinking, a paradigm shift, if you will, by developers and public and private utilities relative to the use of conventional septic tank and tile field systems to decentralized wastewater treatment systems. This has definitely been "thinking out of the box" and it now needs to be expanded to municipal wastewater treatment and land use planning. How many times have we witnessed a municipality extending a sewer line five or ten miles to pick up an industry and end up with development ten miles long and one house deep? This scenario is all too common place and is counter productive to good land use planning that calls for cluster housing and plenty of green space. On the other hand, utilizing decentralized WWTS plays right into the principles of good land use planning.

Over the past several years, "decentralization" has gotten a lot of press. It is a key concept in the ongoing quest to increase supplies of clean energy and water. Basically, it is a strategy to downsize infrastructure, thus reducing the cost of maintaining a grid, whether an electric power grid or the subsurface pipes delivering water and removing wastewater. Obviously, our discussions are focused upon wastewater, but nevertheless, decentralization offers a sound counter argument to the bigger-is-better idea. There is no doubt in my mind that the rebuilding

of the country's water/wastewater infrastructure, an identified national priority, presents an opportunity to decentralize operations.

A remedy to ineffectual concentration, decentralization occurs at different scales. Some systems are located onsite, treating relatively small volumes of wastewater and serving individual or groups of dwellings and businesses located relatively close to each other. At a much different scale, decentralization also can serve relatively large communities and subdivisions.

Decentralized wastewater treatment systems promotes and facilitates rapid growth without the extension of expensive conventional sewer lines and service lateral connections associated with neighborhoods that rapidly deteriorate resulting in the generation of significant infiltration and inflow (I/I) problems. From a systemic view, experts feel we've seen more I/I reduction occur when a thorough sealing job is done in the neighborhoods (including services and manholes) - the system approach. Decentralized WWTS are not plagued by these types of I/I problems because of the configuration of the collection system which does not include the traditional service laterals, but rather a short, water tight connection to a water tight septic tank.

You may be interested to know that I started working for the State of Tennessee in July 1972, the same year (November 1972) that the Clean Water Act (CWA) became law. Please keep in mind that part of the declaration of goals and policy in Section 101 of the CWA is for the elimination of the discharge of pollutants into waters of the United States, commonly called "The Zero Discharge Goal". Additionally, Section 101-CWA called for a major research and demonstration effort to be made to develop technology necessary to eliminate the discharge of pollutants. In the nearly four decades since the passage of the CWA we are achieving some of those goals on a limited basis through the use of decentralized WWTS.

In your March 10th letter you stated your belief that decentralized WWTS may offer numerous options for community preservation and watershed management. I believe you are absolutely correct, because decentralized WWTS have solved significant surface (NPDES) discharge problems in Tennessee. For example, some new permit applications have been denied increased pollutant loadings because the receiving water was impaired and/or had no remaining waste load capacity. These dilemmas have forced direct dischargers to seek other options and in Tennessee decentralized WWTS have emerged as a solution in a growing number of situations.

I am convinced that we will see more and more utilization of decentralized WWTS as time passes. I am also convinced that we will begin to see Tennessee municipalities utilize decentralized WWTS as part of their short term and long term planning. This will definitely be a paradigm shift from some of the poor choices many have, and continue to pursue. By poor choices, I mean exploring options such as hydraulic controlled release. Making plans and decisions on flow variabilities expected during certain times of the year, in my opinion is unwise. As we all know, Mother Nature is not always predictable. In any event, even under the best case scenario when such NPDES permitting options can be utilized, there is still an upper limitation on what and how much can be discharged. On the other hand, decentralized WWTS have the proven capability of taking stress off of centralized WWTS and allowing growth that otherwise would not have been possible.

Furthermore, decentralized WWTS have also helped indirect dischargers (industries who discharge into publicly owned municipal wastewater treatment plants and are subject to pretreatment requirements per 40 CFR Part 403). In several situations, indirect dischargers have been directly impacted via increased sewer rate surcharges and have found relief by installing, or threatening to install, their own decentralized WWTS.

Additionally, we are seeing more and more direct discharges, especially schools switching from being impacted by NPDES direct discharge requirements to decentralized WWTS. The primary reason for switching is the considerable monetary savings in terms of operational and monitoring costs.

The topic of decentralized wastewater treatment raises some important questions: How can the strategy be adapted to areas already served by large centralized treatment facilities? Can such areas be retrofitted for decentralized wastewater treatment and to what extent? What is involved in adapting and installing such systems in areas being planned and developed?

Many cities in the United States, like Phoenix and Atlanta, with large centralized wastewater treatment systems have achieved to some degree decentralized operations by "water scalping" or "sewer mining." These cities have started operating small-scale plants, called scalping plants, which are located in strategic locations in the community to better treat and/or distribute and use reclaimed water. The terms "sewer mining," or "scalping" have been used to describe the addition of WWTS to treat and reuse and/or discharge wastewater streams into regions within larger municipal wastewater systems.

Some advantages of sewer mining in large municipal WWTS are alternative technologies such as staged Membrane Bioreactor (MBR) WWTS. MBRs are beneficially used to intercept portions of the existing sewerage systems, provide longevity, and postpone, or avoid major capital expenditures to centralized wastewater treatment plants. Evaluating staged MBR placement is crucial in determining scalping plant locations. The resultant project(s) from such a determination would provide for collection, treatment, reuse, and discharge at or near the point of source that could reduce or eliminate costly interceptor lines, pump stations, and force mains. In most cities, the existing sewer lines run through older, fully developed portions of the city; therefore requiring major capital outlays and disruption when upsizing is required. Scalping plants such as MBRs also provide significant advantages in reducing I/I problems.

There are numerous benefits associated with the practical implementation of sewer mining. Recycled water produced from sewer mining operations is commonly used to irrigate sports fields, parks and golf courses. It can also be used in some commercial buildings and industrial sites. Sewer mining reduces the stress on waterways by capturing some of the nutrients that would otherwise be discharged from wastewater treatment plants. The demand for drinking water can be significantly reduced, by replacing it with recycled water made available through sewer mining processes.

Because of recent technological advances with such treatment options as MBRs, decentralized solutions to energy and water supply are better than ever. MBRs produce extremely high quality reuse water. As you know, an MBR is the combination of a membrane process like microfiltration or ultrafiltration with a suspended growth bioreactor, and is now widely used for municipal and industrial wastewater treatment. I highly encourage and recommend their use whenever and wherever possible, especially with decentralized schemes.

In addition to the above discussion, the following benefits are also associated with using an MBR:

- Small land areas (footprints),
- No large and unreliable clarifiers,
- Appearance or cosmetics of the facility,
- No odor,
- Ease of operation,
- Easily expanded to meet future growth,
- Can operate treatment plant from remote location by SCADA,
- Minimal operator requirements (average operator works 3-4 hours per day),
- Effluent meets stringent discharge limits, including California's Title 22 reuse standards.

In summary, there are many reasons why municipalities should be using decentralized WWTS which include, but are not limited to the following:

- Consistent with good land use planning.
- Costs per connection are several thousands of dollars less than conventional systems.
- Significantly reduces, if not eliminates, I/I problems.
- Allows for community growth without dependency on direct discharge NPDES permitting constraints such as limitations on additional discharge volumes and waste load allocations.
- Significant monetary savings with regard to operational and monitoring costs.
- Reduces or eliminates liabilities from penalties associated with violations of NPDES permits.

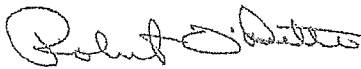
In 2005, Ben Grumbles, former United States Environmental Protection Agency (EPA) Assistant Administrator for Water, said the vision for the agency was: "Decentralized wastewater systems that are appropriately managed, perform effectively, and are widely acknowledged as components of our nation's wastewater infrastructure." I believe that is true across the country

Mr. Jamie Reed
March 15, 2010

with regulators and water professionals, especially here in Tennessee. I do not know of anyone in our department who does not support the vision statement of EPA and thus, the use of decentralized WWTS. However, the caveat is that these systems must be "appropriately managed". Where we have had problems, it has not been with the technology or the concept, but it has been with the lack of appropriate management.

Hopefully, I have satisfactorily responded to your letter. However, if you have other questions or need clarification on anything I've written herein, please contact me personally at (615) 253-5319 or Email: Robert.Odette@TN.GOV.

Sincerely yours,



Robert G. O'Dette, M.S., P.E.
Assistant Manager
Municipal Facilities