Questions submitted to 12/07/10 wastewater webinar:

Questions for Juli Beth Hinds

Please provide documentation for PE's to support PDH credits. Thanks!

While we don't have certificates for documenting PDH credits, we do maintain attendee lists and will verify attendance for PEs who claim the workshop credit through their state continuing education or professional development programs. Please list as the contact: Barry Tonning, barry.tonning@tetratech.com; 859-585-0370.

Does EPA have any plans of regulating/monitoring individual onsite septic tanks/drainfield systems?

We are not aware of any EPA plans to regulate or monitor individual onsite systems that discharge to the soil. Systems that discharge to ditches, channels, or surface waters are regulated under the NPDES permit program. Systems that serve 2 or more buildings or 20 or more people per day are regulated under state and federal Underground Injection Control Programs, as Class V Injection Wells.

How is enforcement of management cost (user fees) handled?

Great question! This depends largely on the enabling statutes governing utility fees, and the legal documents used to incorporate the RME. If RME fees can be charged like water and sewer bills, then the RME may be able to enforce with tax liens and/or shut off of water service. In other communities, unpaid RME fees go through the same process as property tax arrears. Other RMEs or service providers might have to use same type of bill collection process as a utility.

The financial plan was too small to be read. Can you provide more detail or a reference?

First, anyone working with RMEs should take advantage of the excellent resources on decentralized management in general, and particularly financial plan development, that are available through the Decentralized Water Resources Collaborative: http://www.decentralizedwater.org/

From the WERF RME project, RME Fact Sheet 9 is also an excellent place to start: http://www.werf.org/AM/Template.cfm?Section=Decentralized_Systems&Template=/CM/ContentDisplay.cfm&ContentID=11124

My one addition to this is the potential need to add in a revolving loan fund as an income and expense category. Many successful local management and RME projects include a revolving loan fund that property owners can use to repair or replace systems either when needed, in accordance with a phased upgrade plan, or in hardship cases. The RME then takes a legal (and in some cases financial) interest in the system.

What methods of enforcement have been used to assist RMEs and what triggers are used to lead the state agency to enforce?

This depends on the particular regulatory setting, and the relationship between the RME and the agency that has enforcement authority over the type of system in question (e.g. County Health for a septic system, the State DEQ indirect discharge division for a cluster treatment system over 6,500 gpd, etc.). It also depends on whether your RME or pre-RME program will use inspections of systems to conduct an inventory or planning, or whether (as in a few cases) system inspections will be required at the time a property is sold. Inspection programs often are the biggest 'trigger' for more active management and/or enforcement, but for this reason they are also challenging to implement in some communities.

I would encourage you to differentiate between inspections that support implementation (or enforcement) of phased upgrades or improved management, and actual "enforcement" in the case of gross system failures or other violations of how systems are to be operated. The best example I'm aware of for an inspection program that supports implementation (enforcement) of a plan is in Rhode Island, which has a State requirement for cesspools in high risk locations to be upgraded by a certain date, with triggers for when a property owner must complete the upgrade. Many towns have developed their own phased requirements for upgrades and are implementing these through zoning, so that compliance with zoning regulations becomes the enforcement tool. Tiverton, RI has an especially clear explanation of how their zoning-based program and the State program on their website: http://www.tiverton.ri.gov/government/wastewater2.html. This is a good example of how an RME can supplement and work with State programs.

With respect to failures, in the best case for enforcement, the actual regulatory agency will work with the RME to develop consistent enforcement policies and solutions. In many instances, where an RME is available, the remedy for enforcement actions will involve the RME. I am familiar with a case where enforcement led to the issuance of a hardship loan to a property owner, with the RME then having both a maintenance contract in place for the replacement system and a lien on the property in the event of non-payment of the loan. I believe the State of Oklahoma has (or at least had) a program where indigent property owners were eligible for the State to install a new system at no cost, but thereafter an RME would own and operate that system. This was discussed at the State On-Site Regulators Association conference in 2008, and if anyone reading this happens to have more information please pass it along.

Are there any strategies/incentives to increase homeowners' involvement in operating/maintaining their own onsite wastewater systems?

Many, many local programs to educate and engage homeowners in better system management have been developed and promoted. Watershed organizations, schools, demonstration projects, and agency outreach programs are all good places to start. NOWRA has a "homeowners folder" http://www.nowra.org/onsite_guide.html and EPA has many, many tools available at http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=277

When you read these, you have to ask "Will this connect with the people in my community who need this information?" Different things translate in different places. In Warren, VT we were getting nowhere with awareness and involvement until the affected homeowners understood that their water supplies were seriously affected by poorly managed on-site systems. "River? What river? Talk to me about my well and THEN we'll have a conversation!"

Incentives can take many forms; a good one I've seen is to provide a coupon or discount to local retailers (like garden stores or others) for property owners who complete a survey about their on-site system, providing some of the basic information and awareness that is the foundation for setting up an RME. In another scenario, active RME with a fee structure also could provide a discount for property owners who complete inspections, pump-outs, or training.

Is there a complete list of successful RMEs and available where?

A fairly comprehensive list of successful RMEs is available on WERF Fact Sheet #4 for RMEs, available at:
http://www.werf.org/AM/Template.cfm?Section=Decentralized_Systems&Template=/CM/ContentDisplay.cfm&ContentID=11116

Do you recommend that an RME equalize costs for all customers so that user fees are the same for those on sewers, clusters or individual onsite systems?

This is an important question that every RME must deal with, and the only legitimate answer is "it depends." Fees should reflect the level of service customers receive, and also their financial exposure to potential capital costs to repair or replace their wastewater systems. The owner of a septic system faces low, periodic ongoing costs related to regular system inspection and maintenance, but also incurs the risk of having to pay a large amount of money if the system needs a major repair or replacement. A central sewer customer, by contrast, pays a monthly or quarterly sewer bill that's probably much more out of pocket than the septic system owner's average cost for operation and maintenance, but the sewer customer isn't at risk of a sudden, unexpected capital cost for repair or replacements– hopefully, those capital needs have been incorporated into the utility's budget, and thus into the sewer customer's bill.

So, setting fees in an RME operates on a similar approach. An RME generally should charge fees that reflect the level of service provided and the owner's exposure to large future capital costs. So the fee charged for different types of systems should reflect what resources the RME provides to help owners manage, repair and replace those systems. For example, if part of the RME fee goes to support a loan fund for property owners who must repair or replace on-site systems, the fee charged might be higher than if the RME only did maintenance. Getting back to your actual question…speaking very generally, the higher the RME level of involvement, the more likely it is that you can (or should) equalize costs across all types of wastewater systems. If an RME is set up at a fairly intensive level of management where the RME performs O&M and also provides the potential for some financial support if and when an individual or small-scale system must be replaced or repaired, then it is more appropriate to equalize fees. The less the RME does, or the

more limited its role (geographically or service-wise), the more likely it is that fees will be different for different user groups or types.

What are ERUs?

Equivalent Residential Units – the building block for measuring how many 'units' of service an RME needs to plan for treatment or service provisions.

RMEs seem a very green management approach. Has any RMEs been funded nationally under the stimulus funding and the EPA - Green Project Reserve funding?

EPA's guidance on the Green Project Reserve was very clear that decentralized wastewater management could be made an eligible Green Project Reserve project category. I can only speak for certain regarding Vermont, where the State guidance strongly promoted applications for decentralized management and demonstration projects. Unfortunately, I don't think any were able to be funded, but that was more a function of the status of different projects at the time.

Questions for Khalid Alvi

Which state has adapted this tool?

Indiana has adapted TWIST into a completely state-tailored system, called Indiana's Network for Tracking Onsite Sewage Systems (iTOSS) – see Page 2 at this site, for a brief description: http://coastalmanagement.noaa.gov/news/docs/czmnewsoct10.pdf

What entity is responsible for setting up this system and keeping it current? In NYS this would be adopted voluntarily at the county or local level. We at DEC have sent TWIST info out to our OWTS Workgroup members, but I've had only one county comment back. Not sure if they're using it or not.

TWIST is a database "shell" that can be used or adapted by any local or state government or private party. Any entity that uses TWIST would be responsible for setting it up and keeping it current. Note that it is NOT part of any sort of national system registry or inventory.

Is this data management system available to the public without fee? What are the technical services arrangements? Does everyone in the RME have access and/or rights to update?

TWIST is freely available – no technical services arrangements are required, unless the user wants to set something up independently. Access for using individually developed databases would have to be considered and implemented by the user.

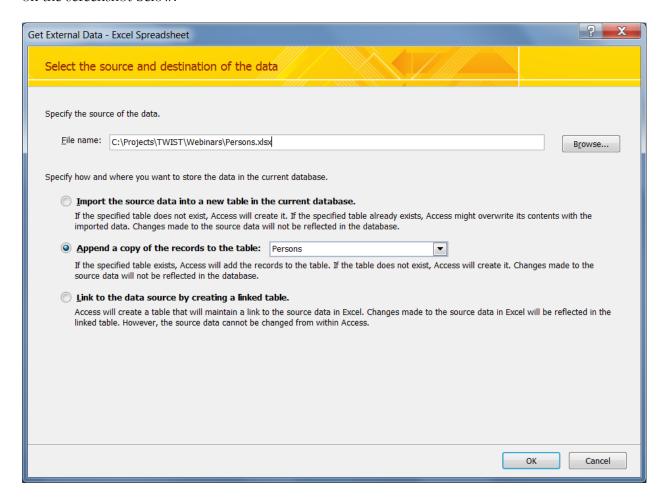**Is this a free program? or a product for sale?**

See response above. TWIST can be downloaded free from www.epa.gov/owm/onsite, and used or adapted with cost or restriction.

Can the TWIST record multiple visits during the permit process?

Yes, TWIST allows the user to enter multiple records for the permit information. If multiple violations are reported upon multiple inspections for a permitted site, the system allows entering multiple records under each permit in the MS Access Database.

Can Excel data be imported into the TWIST program w/out reentering the data such as name and addresses?

Yes, as long as the data format and field names are identical as in the backend database file TWIST_Data.mdb. Remember to hold the shift key while opening the backend database file and then click on the "Import Excel Spreadsheet" option under the "External Data" menu of the MS Access Database. Specify the data source and the target table name on the popup window as shown on the screenshot below.

If TWIST was used in the field (i.e. portable PC, tablet, or laptop); is there any means to synch the new data to a Main Database?

Unfortunately, the current system cannot synch the new data to the main database automatically but it can be customized easily to import the data from the new database file to the main database file through simple macros and queries.