



Ephesus Environmental Outreach

www.ephesusbc.com

March 16, 2005

Dear Onsite Wastewater Advocate:

On behalf of Ephesus Environmental Outreach and the US Environmental Protection Agency (USEPA) funded project the National Model for Minority Training and Education (NMMETD), I am pleased to enclose information for your use on starting an environmental outreach program targeting minority or underserved communities. I am pleased to enclose a CD with detailed steps to starting an outreach program and a DVD with a summary of Ephesus' NMMETD project.

Ephesus Environmental Outreach is a nonprofit organization in West Point, VA established by dedicated church members of Ephesus Baptist Church desiring to expand their ministry to a greater aspect. EEOs mission is to provide onsite/decentralized wastewater management outreach, education, guidance, and assistance to minorities and underserved residents of Middle Peninsula, Virginia to improve water quality to the tributaries of the Chesapeake Bay. Thus far, our outreach program has reached thousands of residents in Middle Peninsula, VA and assisted disadvantaged, minority, and elderly residents with educational opportunities and assistance to improve their decentralized wastewater systems. The combination CD/DVD packet can assist small, rural groups with implementing an environmental outreach program cost efficiently and with volunteer from the community.

As a way to assist you in your endeavor of starting an outreach program, EEO has made available a brochure and other materials to assist in bringing such a program to your area.

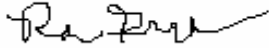
We are happy to enclose the following in this CD:

- Introductory Letter
- Sample Onsite Wastewater Outreach Brochure
- Sample Onsite Wastewater Outreach Program Flier
- Instructional Guide
- Sample Workshop Program
- Sample Newsletter
- Sample Workshop Flier
- Sample Outreach Committee Presentation (Powerpoint)
- Case Study
- Sample Funding Options Publication
- Sample Newspaper Article
- US EPAs Guidelines of Decentralized Wastewater Systems

- Sample Workshop Press Release Articles

We are very excited about your vision to start an outreach program and sincerely hope that your organization will utilize the materials as well as a plethora of resources and expertise from the US EPA staff and materials found at www.epa.gov/owm. Best wishes on your venture to help others in your community and to protect public health and the nation's water resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Rana D. Graham", with a long, sweeping horizontal stroke extending to the right.

Rana D. Graham
Director,
Ephesus Environmental Outreach

**The National Model for Minority Education and Training Demonstration
(NMMETD) Case Study
at
Ephesus Baptist Church, West Point, Virginia**



I. Background

Established in 2003, Ephesus Environmental Outreach (EEO) supports environmental efforts to improve onsite wastewater management in Middle Peninsula, Virginia to protect public health and the environment in small and rural communities with limited access to technology. Funded through the U.S. Environmental Protection Agency (EPA), the National Model for Minority Education and Training Demonstration (NMMETD) targeted minority and indigent residents in King & Queen, Essex, and King William Counties by educating homeowners about the management of onsite systems and assisting residents with funding options for managing, funding, installing, and disseminating information about onsite wastewater systems are a cost effective alternative to centralized sewage systems. Information dissemination, education, and training are essential components of the NMMETD.

II. Objectives

The primary objective of this demonstration project is to reach out to minority and indigent residents with limited access to onsite wastewater management education and basic sanitation in Middle Peninsula, Virginia. The demonstration project provided homeowners with direct access to soil scientist, biologists, onsite loan representatives, health professionals and introduced EPA's Guidelines for Onsite Decentralized Wastewater Systems.

Additional Objectives include:

- Provide funding options for residents with failed systems.
- Provide resources so residents can institute at minimum Level One of EPA's Guidelines for Onsite Decentralized Wastewater Systems.
- Measure the voluntary adoption of EPA's Guidelines for Onsite Decentralized Wastewater Systems.
- Establish working partnerships with state, regional, and national organizations, citizen groups, equipment manufacturers, regulators, and others involved in this industry.

III. Tasks of NMMETD

Task 1: Setup

Establish a resource center, telephone hotline, website.

The resource center will have free septic information for interested homeowners and information on the upcoming onsite workshops. Also, the hotline and website will serve as additional methods for interested homeowners to receive information on septic systems. Meet with RMEs (Three Rivers Health District, Planning Commission, Septic Maintenance Companies, etc.) to facilitate alliance within counties and introduce Guidelines in attempt to adopt.

Task 2: Organize

Develop contact list, brochures, business cards. Compose surveys for area residents attending workshops. Order booklets and available onsite resources. Publish articles on EPA grant in local newspapers.

Task 3: Train and educate a group of community leaders to assist in outreach.

Task 4: Determine areas of greatest need by targeting low-income minorities.

Task 5: Research external sources for septic system funding and make information available to community.

Task 6: Implement outreach to underserved minority communities. Begin presentations at local churches, schools, community centers. Disseminate information via county mailings, newsletter, newspaper publishings, outreach center, onsite hotline, and website.

Task 7: Implement workshops (1 per quarter) and establish quarterly status reports of seminar and workshop participants. A segment of the workshops will be dedicated to introducing EPAs Guidelines for Onsite/Decentralized Wastewater Management in hopes of future adoption of Management Level One. Distribute quarterly newsletter to churches, community centers, and mailing list.

Task 8: Submit surveys to participants at workshops to analyze the outreach progress.

Task 9: Develop case study and make available to interested communities via web, cd rom, and hard copy.

IV. NMMETD Deliverables

- Provide a guide for small communities without financial resources for onsite wastewater management.
- Onsite wastewater management hotline
- First onsite wastewater management resource center in Middle Peninsula, Virginia
- Onsite website for residents to use and to make the project accessible to other small communities across the nation (final case study will be made available on web)
- Provide a guide for communities to bridge the gap between indigent minority communities and local onsite programs/health department.
- Research and publish available external resources to fund onsite systems in the Middle Peninsula (tool for residents)
- Publish a quarterly onsite newsletter for residents
- Brochures, newspaper articles, and fliers for the communities

EEOs Resources

- Resource Center
- Hotline
- Website
- Opportunity to Win Free Water Quality Testing
- Opportunity to Win Free Septic System Maintenance
- Educational Materials
- Technical Assistance
- List of Funding Options in Middle Peninsula, VA
- Workshops

V. Middle Peninsula, Virginia

Overview

The Middle Peninsula region of Virginia, like several rural communities across the United States, has been characterized as lacking suitable onsite wastewater disposal systems, lacking community and/or potable water supplies, having inadequate storm water drainage, and substandard housing. The Three Rivers District, which oversees several rural counties in Middle Peninsula, estimates 244 failed systems not yet corrected because of financial constraints and an estimated 150 houses lack sanitary facilities or outhouses are unusable. According to the VDH, the state of Virginia ranks among the top states in the US for the worst wastewater management.

Ephesus, a church committed to serving the community in a plethora of public service areas, reaches out to low-income families to provide guidance and education in an array of issues affecting minorities in the 21st century. Ephesus has been helpful in guiding residents in financial, homeowner, spiritual, and healthcare areas, yet they have been unsuccessful in the wastewater arena, where many underprivileged residents lack basic sanitation. Many residents have lived in this condition (no plumbing, out-houses) their entire lives and are not aware of how to make a change nor are financially capable of a transition. In rural communities, minority residents often depend on churches to provide assistance when a housing, personal, or financial problem arises. Ephesus Church developed an environmental outreach component solely dedicated to onsite wastewater outreach in the community and to facilitate the NMMETD. This outreach center is the only outreach center in Middle Peninsula, Virginia dedicated to promote onsite wastewater education. The NMMETD project targeted three counties within Middle Peninsula; King William County, King Queen County, and Essex County.



Figure 1. Outhouse in Middle Peninsula



Figure 2. Dilapidated Trailer in King William County

VI. Project Activities

- NAACP Meeting King William
- NAACP Meeting Essex
- Senior Citizens' Picnic
- Church Outreach
- Sunday School Union Meeting
- Senior Centers of King William (Upper, Middle, Lower)
- Rivah Festival
- Crab Carnival
- Bethel Restoration Sunday Class
- Workshop 1
- Workshop 2
- Workshop 3
- Workshop 4
- Septic Pump-educational opportunity for residents to experience maintenance at its finest. Residents were selected at each workshop according to financial need.



Figure 3: Residents learn about EPA's Guidelines for Decentralized Wastewater Systems.

VII. Regulatory Information

Onsite wastewater systems in Middle Peninsula area are under the purview of the Three Rivers Health Department. In Virginia, state requirements were changed in 200X becoming more stringent. In the past, 12 inches of soil were required to place a conventional septic system, however recent changes require 18 inches of soil for a conventional system. This presents an obstacle in Middle Peninsula because it is a peninsula surrounded by rivers, streams, high water tables, and is a tributary of the

Chesapeake Bay. This new regulation requires residents to place alternative systems instead of conventional septic systems resulting in a price increase up to 10-20k.

VIII. Public Education/Benefits

- During the one year project, four workshops were held at the outreach center for residents, state and local regulators, manufacturers, environmental scientists, and funding program representatives. More than 180 individuals attended the workshops in 2004. Sessions vary in complexity based on the presenter and the workshop number. In the beginning workshops presenters were asked to remain basic as the group advanced with onsite education.
- Educational Presentations were performed at local churches, civic centers, and events that we were invited to attend. An outreach team was formed to more effectively facilitate this aspect of the outreach program. A fifteen minute powerpoint and overhead presentation were developed to convey the onsite wastewater management education to homeowners at these meetings. The residents were encouraged to attend our workshops for more detailed information or assistance.
- Ephesus Environmental Outreach was the first outreach center in Middle Peninsula, Virginia dedicated to onsite wastewater management education. The resource center was located inside of Ephesus Baptist Church, where residents had access to education every day of the week. A hotline, website, and educational materials were available to all residents regardless of socioeconomic background. Residents lacking internet access were able to use laptops available in EEOs resource center during regular business hours.
- In order to attract residents that usually would not attend onsite wastewater workshops, EEO decided to target a wider array of residents by introducing a healthcare component to the workshops. EEO focused on healthcare issues that were prevalent in minority communities, especially African Americans. Seminars were held on hypertension, drug interactions, cancer, dentistry, diabetes, and dietics. This fostered community involvement and a greater sense of awareness in various areas.
- Free Maintenance was offered at each workshop for residents based on financial need. EEO partnered with a septic maintenance company, Atlantic Systems, to provide maintenance and diagnosis to residents in need at an affordable cost to EEO. The selected residents had to receive an one-on-one educational session about the proper management of septic systems. A plan was developed to help the residents based on their specific needs. After the session, Atlantic Systems was informed of the recipient of the free service and Atlantic then provided maintenance of the system. During the service of the system, Atlantic demonstrated the components of a septic system and how they are maintained. If additional problems were detected, Atlantic Systems notified the

- Residents formulated a letter to send to our local representative, Congresswoman Joanne Davis. In turn, Congresswoman JoAnne Davis' staff set up a meeting with EEO and local agencies to find solutions to the onsite wastewater problems in Middle Peninsula, VA. Her local office was not aware of the problems with onsite wastewater systems or the new regulations passed in the state of Virginia. A plan to finding additional funding solutions and more insight on the new regulation was developed and is ongoing.

IX. Lessons Learned

- Funding options continues to be a familiar cry of rural communities across the nation. It is recommended that communities implementing a similar project have concrete funding options available for the residents before beginning an onsite education program. Education and funding solutions run hand and hang. We found that indigent residents were willing to adopt the guidelines and rehabilitate their systems, they just did not have the funding options. The two funding options in Middle Peninsula, VA were grant/loan programs, however the funding is scarce and the application requirements are often difficult for residents with under \$15,000 income to get approved. If it more convenient if the agency implementing the education actually runs the loan program.
- Measures to hold agencies accountable. Residents were concerned that agencies were not giving all residents equal opportunity to access grants available. Residents were not receiving returned phone calls from many agencies or being approved to receive the funds available. A meeting among concerned residents, EEO, and the agencies of concern is in progress to address the concerns of the community.
- In rural communities, county officials are not welcoming to change. It would have been beneficial to have greater interaction with the counties' Board of Directors to include them in strategizing for funding options. In order to get a community development block grant the board of supervisors must approve it and take responsibility to request the grant and administer it. Only one of King Williams' Board of Supervisors even entertained our many requests to attend workshops or interact with community members in need of septic rehabilitation.
- The more incentives EEO included at our outreach forums the more community participation we received. Giveaways and breakfast and lunch being provided at the workshops were incentives for residents to attend the workshops.

X. Summary

In conclusion, the NMMETD increased public awareness about management and maintenance of onsite systems, as well as introduce EPAs Guidelines for Onsite/Decentralized Wastewater Management Systems and EPAs programs and

activities to the residents. NMMETD played a role in educating local officials about the Guidelines and homeowners about the problems with septic systems in the Middle Peninsula. EEO did presentations at local churches, civic centers, fairs, carnivals, or wherever the opportunity presented itself. EEO found that rural residents were receptive to EPA's Guidelines through surveys taken at each workshop. At the final workshop 100% of the participants volunteered to adopt the Guidelines. EEO found that residents were receptive to any assistance that EEO or local agencies could offer and residents young and old were eager to learn about the management of systems, however financial constraints hindered many residents from repairing faulty systems.



Figure 4: Youth Environmental Workshop: Youth enter a drawing competition on the Importance of the Environment.

XI. Key Players and Partnerships

Key players and partners are critical to the success of an environmental outreach program. During the project several organizations contributed to the success of offering the maximum resources to the residents of Middle Peninsula, VA.



Figure 5: Ephesus Volunteers: Board of Advisors

A. Ephesus Volunteers-Ephesus has over 100 volunteers and 9 served as the board of advisors which assisted in facilitated the grant. An additional 10 members served on the outreach committee where they performed presentations throughout the community.

B. Virginia Department of Health-Headquarters-VDH has assisted EEO with resources, support, technical assistance, and performed presentations at workshops.

C. Delmarva-Delmarva, a septic system and cluster system manufacturer, partnered with EEO to illustrate the benefits of their system and offered reduced rates for EEO workshop participants. Delmarva provided demonstrations alternative systems that

would be suitable for the high water tables in Middle Peninsula. Due to financial constraints residents as of yet have not used Delmarva systems for rehabilitation, however the educational experience was invaluable to demonstrate the options available to aid them with current dilemmas.

D. Atlantic Systems, Williamsburg, VA- EEO recognized that it was critical to work hand and hand with a septic maintenance company in order to educate residents and encourage them to maintain their systems, therefore a partnership was established between EEO and Atlantic Systems. As an incentive to get residents to attend workshops, free maintenance was offered to residents based on financial need. At a reasonable cost to EEO, Atlantic provided the maintenance of the system, an educational experience for the homeowner, and analyzed if additional problems exist with the system. In Middle Peninsula, VA, due to the shortage of staff at health departments, it is recommended that an experienced septic maintainer analyze your system. Once residents are ready to take action and repair or replace systems, then the health department is requested. Atlantic Systems can give a resident an answer about their system without the lengthy wait to get an environmental specialist visit. During EEOs workshops, several residents were selected to receive free maintenance. After their selection and recognition, residents had to attend an educational session with EEO staff to impress the importance of maintenance of decentralized systems. Residents selected for the free maintenance were:

1. Diane Powell
2. James Wright
3. Fidella Young
4. Mattie Gary
5. Paulette Washington
6. Dennis Graham
7. Douglas Johnson
8. Elsie Mickens

E. Bay Aging-A local housing authority offers a grant and loan program to elderly, disadvantaged residents where housing and septic rehabilitation may be provided. Bay Aging presented at our workshops to ensure that residents were aware of their program. Applications and additional information were made available at EEO.

F. Middle Peninsula Planning District Commission (MPPDC)-A local non-profit, offers a low to now interest loan/grant program for septic system rehabilitation based on income. MPPDC presented their loan program at workshops and provided loan applications to EEOs outreach center.

G. Congresswomen Joanne Davis & Staff- A meeting was held with MPPDC, EEO, and regional director, Joe Schumacher, from Congresswomen Joanne Davis' office. The meeting had an onsite wastewater management focus and the organizations presented the facts on the need for financial assistance in aiding residents with wastewater problems. As a result of the meeting, Congresswomen Joanne Davis' office will research the need in Middle Peninsula and pursue avenues to increase funding options within MPPDC existing onsite grant/loan program.

H. Three Rivers Health District- The Three Rivers Health District oversees all counties in Middle Peninsula. The health departments provided pamphlets, applications for home visits, and environmental specialists for each county of interested attended numerous workshops to present the resources that are available within the health department. The environmental specialists reviewed important maintenance and management facts about septic systems and did question and answer sessions.

I. Local Chapters of National Association for the Advancement of Colored People (NAACP)-King William and Essex County Chapters of NAACP embraced the NMMETD and offered to allow EEO outreach members to present at their monthly NAACP meetings in various minority churches throughout the counties. A brief power point presentation took place at these meetings where information about our upcoming workshop and paraphernalia were given out. These presentations served as a mechanism to get the word out about NMMETD and encourage residents to attend the workshops for more in debt information and educational experience.

J. Local Churches-Macedonia, Bethel Restoration, Mount Olive, First Baptist were local churches that extended their sanctuaries to allow EEO to provide educational presentations for the community. All local minority churches in King William, King & Queen, and Essex County were included on all mailing lists and were extended the same opportunity.

XII. Contact Information

For more information feel free to contact: Ephesus Environmental Outreach; 32681 King William Highway; Post Office Box 1628, West Point, VA 23181 (804)843-4806 phone (804)843-9206 fax, www.ephesusbc.com

NATIONAL MODEL FOR MINORITY EDUCATION AND TRAINING INSTRUCTION GUIDE/ACTION PLAN

Task 1: Setup (Time Frame-1 MONTH)

- ❑ Establish a resource center
- ❑ Establish a telephone hotline
- ❑ Develop brochure or use sample provided
- ❑ Develop business cards
- ❑ Establish a website
- ❑ Meet with Regulatory Management Entities (RMEs), local environmental groups, churches where target residents attend, clubs and organizations that target residents attend, etc to inform them of your plans and solicit their support and services where applicable in this endeavor.

COST: Varies; Resource Center may cost rental fees, however in NMMETDs case, the church provided the resource center. Hotline cost approximately \$75/month. Brochure was developed see sample and mass produced using a print company \$500. Business cards \$100. Website costs were approximately \$2500.

Task 2: Organize (Time Frame-2 MONTHS)

- ❑ Develop contact list of organizations with established partnerships
- ❑ Compose surveys for area residents attending workshops
- ❑ Order booklets and available onsite resources from USEPA Office of Wastewater Management. Files are available to perform mass production of EPA's information material. <http://cfpub.epa.gov/owm/septic/home.cfm> Contact for the Onsite Wastewater Information CD. Local printing companies can mass produce educational documents.

COST: Depends on amount of copies needed. \$1,000-\$10,000

- ❑ Publish articles on outreach project in local newspapers. See sample newspaper articles. Many local papers do not charge a fee for this service.

COST: Free

Task 3: Outreach Team (2 MONTHS)

- ❑ Train and educate a group of community leaders to assist in outreach. Can use a volunteer approach to run the outreach component. Costs associated are food at meetings, shirts for the outreach team, reimbursement of gas costs. These incentives were enough to get an adequate number of volunteers ranging from age 8-75.

COST: \$2,000

Task 4: Strategy (2 MONTHS-ONGOING)

- ❑ Determine areas of greatest need by targeting undeserved/minorities.
- ❑ Strategize a point of contact or plan of reaching the maximum amount of underserved residents.
- ❑ Setup presentations at local churches, centers, schools, etc.

COST: Administrative staff to facilitate project-VARIES

Task 5: Funding Solutions (1 MONTH-ONGOING)

- ❑ Research external sources for septic system funding
- ❑ Make information available to community.
- ❑ Explore leads for additional funding.

COST: Administrative staff to facilitate project-VARIES

Task 6: Implement Outreach to Underserved Communities (ONGOING)

- ❑ Presentations at local churches, schools, community centers.
- ❑ Disseminate information via county mailings, newsletter, newspaper publishings, outreach center, onsite hotline, and website to minority homeowners. Check for existing county mailings that you may be able to publish material for free versus send your own county mailing ranging in about \$5,000 for one mailing for a county of 11,000 (subject to change based on population, local fees, mailing permits, etc)
- ❑ Update mailing list each quarter.

COST: Administrative staff to facilitate project-VARIES

Outreach Team reimburse gas mileage, etc.-VARIES

Mailing Lists-postage, staff to supply mailings-\$5,000+

Task 7: Implement Workshops (1 per quarter) (ONGOING)

- ❑ Issue Pre-event Press Release for workshop (see sample)
- ❑ Establish Quarterly Status Reports of seminar and workshop participants to update mailing lists and analyze workshop participant needs.
- ❑ Distribute Quarterly Newsletter to churches, community centers, mailing list, etc.
- ❑ Introduce Guidelines for Onsite/Decentralized Wastewater Management at Workshops
- ❑ Free Septic Maintenance for Applicants of Greatest Need-Partner with a Maintenance Provider for Reduced Fee.
- ❑ Have Local Onsite Wastewater Funding Groups Attend Workshops to Give Participants Direct Access to Funding Sources in the Community.

COST: \$2,000 per workshop for about 100 participants (includes food, building, guest speakers.)

COST: \$200 per newsletter mailing for postage and staff-Varies

COST: Septic Maintenance costs about \$145 per winner-applications taken at workshops at greatest need selected at end of workshop.

Task 8: Survey (AT WORKSHOPS)

- ❑ Submit surveys to participants at workshops to analyze the outreach progress.
- ❑ Issue Post-Event press release-(example provided)

COST: Staff to analyze surveys-VARIES

Task 9: Analyze the Need of Residents Who Do Not Get Assistance or Septic Rehabilitation by this Point (ONGOING)

- ❑ Contact residents who did not receive assistance with their septic problems. Usually finances or motivation are the main reasons residents with septic problems have not rehabilitated their systems after attending workshops with funding programs

COST: Staff to analyze surveys-VARIES

Task 10: Awards Dinner for Volunteers of Onsite Wastewater Outreach Program

- ❑ Secure a location, catering, and speaker for awards dinner.
- ❑ Send out awards dinner invitations to volunteers.
- ❑ Order awards or make certificates for volunteers.
- ❑ Design awards dinner program and finalize participants in the ceremony, speaker, etc.
- ❑ Reward your dedicated volunteers with an awards dinner celebrating their dedication and commitment to the community.

COST: \$2,000 (Caterer, Guest Speaker, Awards)

Ephesus Environmental Outreach



Ephesus Baptist Church

32681 King William Highway

Post Office Box 1628

West Point, Virginia 23181

(804)843-4806 (p) (804)843-9206 (f)

www.ephesusbc.com/eeoc.index.html

"A church striving for a more excellent way"

MISSION

To provide environmental outreach, education, and assistance to residents of Middle Peninsula, Virginia to improve water quality to tributaries of the Chesapeake Bay and protect the environment in our community.

Resources Available:

- Resource Center
- Educational Materials
- Technical Assistance and Home Visits
- Septic System Maintenance Opportunities
- Water Quality Testing Kits
- Information on Funding Options for Septic Systems
- Workshops



Logo

Ephesus Environmental Outreach

Funding Options for Onsite/Decentralized Wastewater Treatment Systems in Middle Peninsula, Virginia



1.) *Bay Agency for Aging*: Indoor Plumbing Rehabilitation for failed systems (incomplete plumbing) or no indoor plumbing; low interest loan salary

Contact: Louis Lee at (804)758-2386

2). *Middle Peninsula Planning District Commission (MPPDC)*:

Low Interest to No Interest Loan Repair for septic systems. Interest Rate Based on Income

Contact: Lewie Lawrence at (804)758-2311



Ephesus Environmental Outreach Newsletter

Editor: Stacy Smith

Volume No.1

Issue No.3

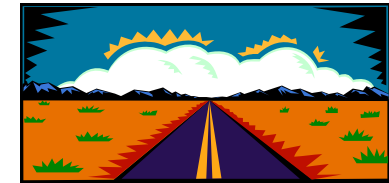
July 2004

Workshop #3

Rain nor thunder can stop us! On a rainy July 24, 2004, Ephesus Environmental Outreach (EEO) held it's third workshop entitled, "Solutions to Improving Environmental Issues in Our Community." The workshop consisted of an informative septic system presentation by Wyn Davis of the Virginia Department of Health, Essex & King & Queen Counties and environmental awareness presentation by Rana Graham, Director of EEO. In addition, Allen Knapp of the Virginia Department of Health Headquarters, (shown below), enriched the participants with knowledge on funding options available to indigent communities and local rehabilitation projects going on in our area. Free septic system maintenance was won by Paulette Washington of King William and Joseph Chapman of Plainview, VA. A children's workshop was hosted by Danell and Lone Walker of Bethel



Restoration, Williamsburg, VA. In addition a healthfair was held to address health disparities in the African American community. Vanessa Mickens, RN discussed hypertension, cancer, and measured blood pressures. Rana Graham, student dentist, emphasized the importance of oral hygiene and regular dental appointments every six months for healthy patients. Staff member Kimberli Roane registered people to vote for the upcoming November election. Pharmacist Vickie Randall, RPH discussed drug interactions and their effects on the body. A cookout was planned, however the weather kept us indoors to fellowship over a catered lunch of delicious soul food. The workshops are free of charge and all residents are welcome to attend. EEO's goal is to provide septic system outreach and educational materials to residents to improve their quality of life. Please join us at our final workshop scheduled on November 20, 2004 at 9am.



Out and About

EEOC was a participant in the Senior Citizens Picnic held on June 4 at Dick Campbell's Pavilion. There were about 250 seniors participating who had fun taking our septic quiz in order to receive a t-shirt. KW Social Services department and the American Red Cross were some of the other agencies participating. EEOC also was a part of the Rivah Festival in Tappahannock on June 19, 2004. Our director, Rana Graham, had fun passing out lots of information. This event was attended by well over 7,000 people.

Why Maintain your Septic System?

A key reason to maintain your septic system is to save money! Failing septic systems are expensive to repair or replace, and poor maintenance is often the culprit. Having your septic system inspected (at least every 3 years) is a bargain when you consider the cost of

replacing the entire system. Your system will need pumping every 3 to 5 years, depending on how many people live in the house and the size of the system. An unusable septic system or one in disrepair will lower your property's value and could pose a legal liability.

Other good reasons for safe treatment of sewage include preventing the spread of infection and disease and protecting water resources. Typical pollutants in household wastewater are nitrogen, phosphorus, and disease causing bacterial and viruses. Nitrogen and phosphorus are aquatic plant nutrients that can cause unsightly algae blooms. Excessive nitrate-nitrogen in drinking water can cause pregnancy complications, as well as methemoglobinemia (also known as baby blue syndrome) in infancy. Pathogens can cause communicable diseases through direct or indirect body contact or ingestion of contaminated water or shellfish. If a septic system is working properly, it will effectively remove most of the pollutants.

(Taken from EPA Pamphlet 832-B-02-006)

KIDS CORNER

By Antonio Roane, 7th grader at West Point Middle School

I'm happy that I didn't sleep in this Saturday because I learned a lot of interesting things at the workshop. I

learned that your water goes through different cycles to get into the sinks, bath tubs, and other indoor plumbing. I also learned that you should have



your septic tank looked at every 3 to 5 years. But the biggest thing I learned were the different things you shouldn't put in your toilet like paper towels, paint, oil and grease. I had a lot of fun at this workshop. I can't wait until the next one.

Flush Responsibly

- Dispose of excess household grease (meat fats, lard cooking oil, shortening, butter and margarine, etc) diapers, condoms, and personal hygiene products in the garbage can. These materials can clog pipes, and could cause raw sewage to

overflow in your home or yard, or in public areas.

- Don't pour used motor oil down the drain. Used motor oil

can diminish the effectiveness of the treatment process and might allow contaminants to be discharged. The contaminants could pollute local waterways or harm aquatic life.

- If you are a dark room hobbyist, dispose of spent fixer, developer, and other photographic chemicals in separate containers and transport them to a hazardous waste facility. Like household hazardous wastes and used motor oil, photographic chemicals can interfere with the wastewater treatment process and could result in pollutants being discharged into local waterways.

Need Assistance?

King William: You can contact Claire Evans at the King William Health Department at 804-769-4914.

King & Queen and Essex: Contact Wyn Davis at 804-443-4076.

Bay Agency for Aging: Indoor plumbing rehabilitation for failed systems (incomplete plumbing) or no indoor plumbing; low interest loans
Contact Wayne Talley at (804) 758-2386.

| | |
|-----------|-------------------------------|
| Tuesday | 9 a.m. – 2 p.m. |
| Wednesday | 9 a.m. – 2 p.m. 6 – 8 p.m. |
| Thursday | 6–8 p.m. |
| Friday | 6–8 p.m. |
| Saturday | 9 a.m. – 2 p.m. |

EEOC Hours

The Ephesus Environmental Outreach Ministry is located at 32681 King William Highway; P. O. Box 1628, West Point, VA 23181. Phone: (804) 843-4806, Fax: (804) 843-9206; or visit our website www.ephesusbc.com/eec/index.html

If you are interested in having a presentation done for your civic or church group, please contact us and we will be glad to schedule one.

Hours of operation are:

| Day | Hours |
|-----|-------|
|-----|-------|

Tidewater Review Article
West Point, Virginia

Outreach continues at Ephesus

By FRANCES HUBBARD
Staff Writer

King William – Ephesus Baptist Church continues its community outreach by offering the second of four environmental workshops on April 24.

In December, Ephesus Baptist Church received a \$105,000 grant from the US Environmental Protection Agency to provide waste management programs to the residents of King William, King & Queen, and Essex counties.

Through this grant, the church will be offering seminars, presentations and four workshops.

The first workshop, held on Jan. 24, was entitled “Improving Our Community for A Better Tomorrow.” Rana Graham Director of the Ephesus Environmental Outreach Center (EEOC) and Claire Evans and Alwyn Davis of the Virginia Department of Health provided informative septic system presentations. James Mickens of King William won the drawing for free water quality testing, and Diane Powell of King William won free septic system maintenance.

Danell and Ione Walker of Bethel Restoration of Williamsburg hosted a kids’ environmental workshop.

April’s workshop is entitled “Another Step Towards Improving Our Community” and will include a septic system seminar, assistance for residents with septic problems, guest speakers (NC State Professor/EPA Visiting Scientist, Bay Agency for Aging), an opportunity to win a free septic system pump (est. value \$200),

free lunch and giveaways, a kids environmental workshop, and free dental screening by the MCV School of Dentistry and Dr. Lisa Curry from Williamsburg.

“We had a great turnout at the first workshop and the environmental information was well received by the participants. Ephesus’ looks forward to our April Workshop. Residents learned a great deal about wastewater management and the do’s and don’ts in caring for your septic systems,” said Rana Graham, director of Ephesus Environmental Outreach.

This outreach is available to all residents who would like information on how to ensure their septic system is effective and who are interested in increasing the water quality in their area. The church is hoping that this grant will give assistance to those who need it while increasing the all around wastewater management conditions in the indigent areas of these counties.

The workshop is scheduled for April 24 at 9:00 a.m. at Ephesus Baptist Church, 32681 King William Highway (Rt. 30). The remaining workshops are scheduled for 9:00 a.m. on July 24 and Nov. 20.

If you would like more information: Ephesus Environmental Outreach Center, Ephesus Baptist Church, 36681 King William Highway; PO Box 1628, West Point, VA 23181, (804) 843-4806 phone, (804) 843-9206 fax, or visit www.ephesusbc.com/eeoc/index.html.”



Ephesus

Environmental Outreach

"A Church Striving For A More Excellent Way"

VISION

Onsite/decentralized wastewater systems are cost effective long-term options in order to protect public health and the nations' water resources.

MISSION

To provide onsite/decentralized wastewater management outreach, education, guidance, and assistance to minorities and underserved residents of Middle Peninsula, Virginia to improve water quality to the tributaries of the Chesapeake Bay.

Ephesus Baptist Church
32681 King William Highway (Rt 30)
Post Office Box 1628
West Point, VA 23181
(804)843-4806 phone
(804)843-9206 fax
ephesusbc.com

Hours of Operation: Tuesday 9-2; Wednesday 9-2, 6-8; Thursday 6-8; Friday 6-8; Saturday 8-3

How Your Septic System Works?



Ephesus Environmental Outreach (EEO)

Ephesus Baptist Church

Post Office Box 1628

West Point, VA 23181

(804)843-4806

Onsite/Decentralized Wastewater Systems Informational

US Environmental Protection
Agency funded grant
www.epa.gov

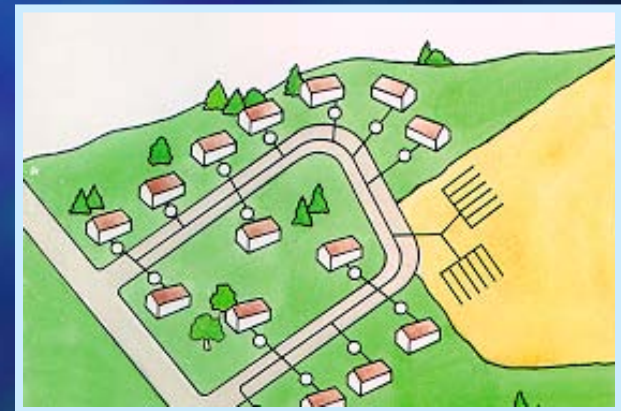
- Provide Outreach to Residents of KW, KQ, Essex Counties
- Educate Community on Septic Systems
- Teach Homeowner to Maintain their Septic system by: Pumping it, Inspecting it, and Keep hazardous wastes out of sink and toilet.



What are Decentralized Wastewater Systems?

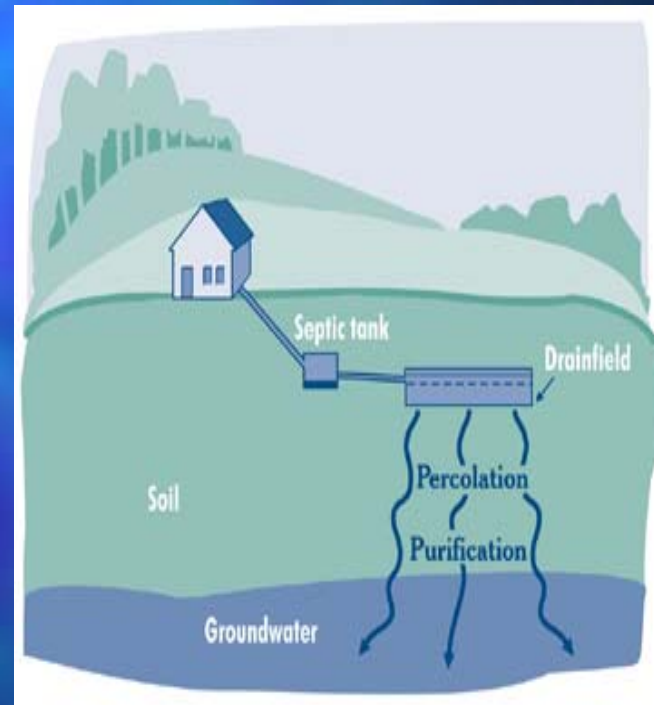
A.K.A. . . .

Septic Systems,
Onsite Systems,
Individual Systems,
Cluster Systems,
Package Plants
Large Capacity Septic
Systems



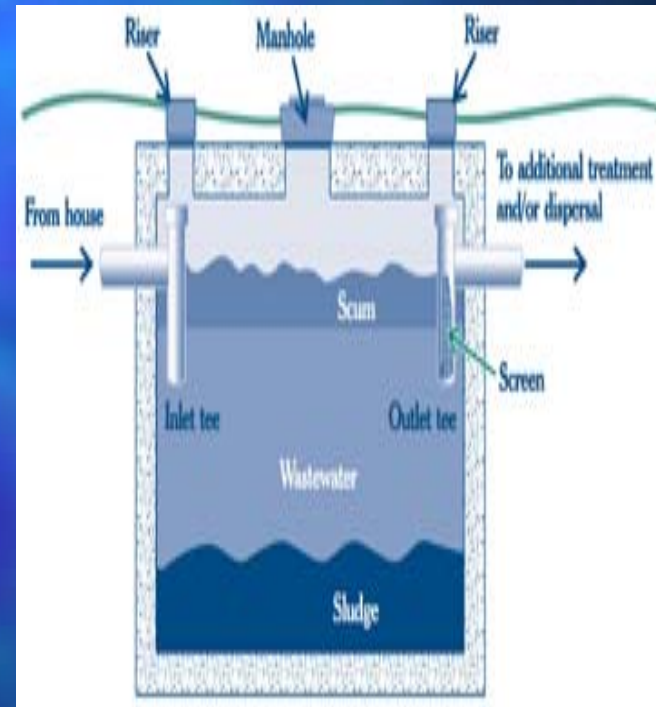
What is a Septic System?

- Underground engineered tank consisting of multiple units, together with one or more connecting piping systems installed in appropriate soils to receive wastewater flow from a residence.



What is a Septic System? (cont'd)

- Wastewater is pre-treated in the tank using a holding device.
- The tank should retain wastewater for 24 hours to treat the waste.
- Usually floatable solids (oil/grease) rise to the top while settleable solids settle to the bottom.



What is a Septic System? (cont'd)

- Some solids are removed from the wastewater, some digested, and some stored.
- About 50% of solids retained in the tank decompose, while the remainder accumulate as sludge at the tank bottom and must be removed periodically by PUMPING the tank.

Where is your Septic System Located?

- Many Homeowners Do Not Know the 411 on Septic Systems: Location, Maintenance, Etc,
- Lack of Knowledge is what this Grant is Trying to Improve
- We are Targeting Indigent and Minority Residents in KW, KQ, Essex that Need Assistance with Septic Problems

Last Service Date of Septic System???

- Do you know????
- Holding Tank Needs to be Pumped Periodically
- Chesapeake Bay Act Recommends that Residents Pump Septic Systems Every 5 Years

What Happens After the Flush?

Out of sight out of mind is the attitude that most of us have when it comes to flushing the toilet, popping the bathtub drain, or running the dishwasher. But all of the wastewater goes **SOMEWHERE.....**

If You Don't Service Your System

- Sludge Accumulates/Levels Increase
- Wastewater Spends Less Time in Treatment Tank
- Solids are More Likely to Escape into Absorption Area
- According to the EPA, Properly Sized Tanks Can Accumulate Sludge for at Least 3 Years

Frequency of Pumping Depends On....

- Tank Capacity
- Amount of Wastewater Flowing in the Tank Related to Size of Household
- Performance of Final Treatment
- Amount of Solids in the Wastewater (e.g. more solids if garbage disposal used)

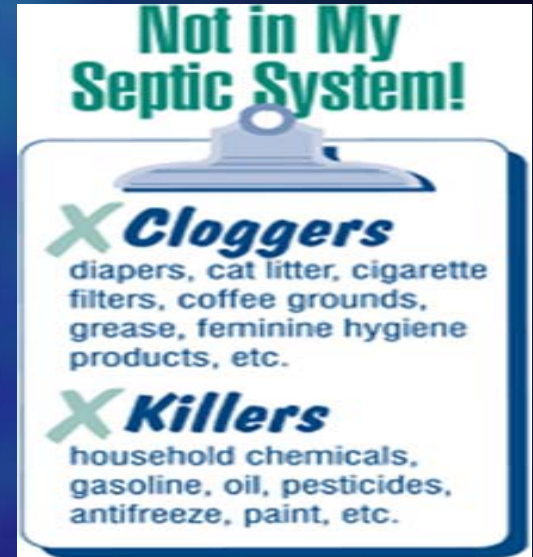
Not in My Septic System!!

⌚ Cloggers

diapers, cat litter, cigarette filters, coffee grounds, grease, cat litter, paper towels, feminine hygiene products, dental floss, etc.

⌚ Killers

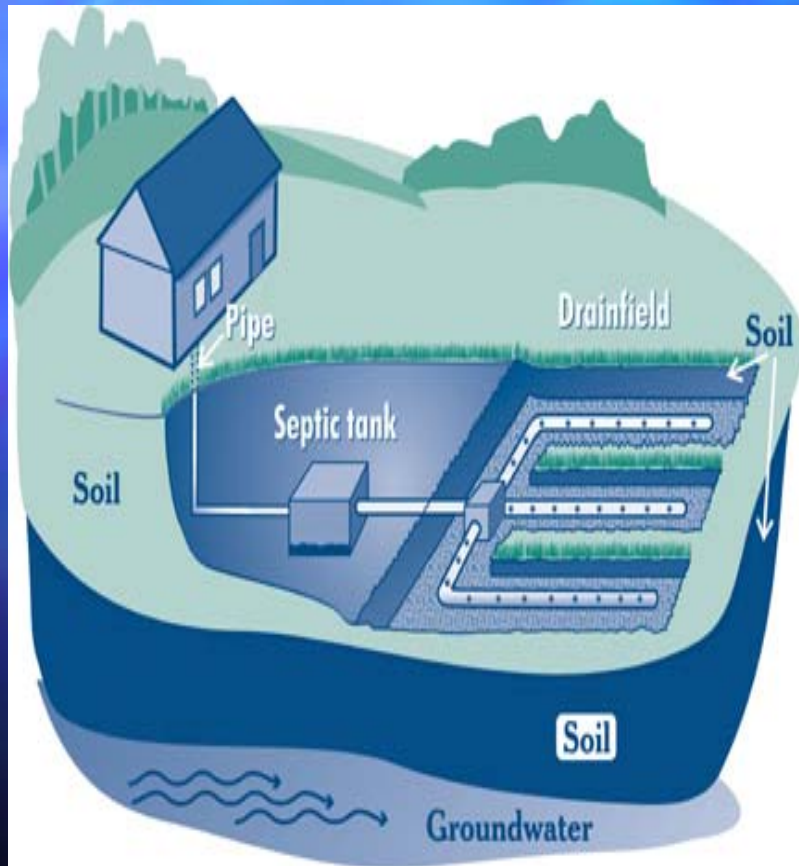
household chemicals, gasoline, oil, pesticides, antifreeze, paint, etc.



Things to Keep in Mind:

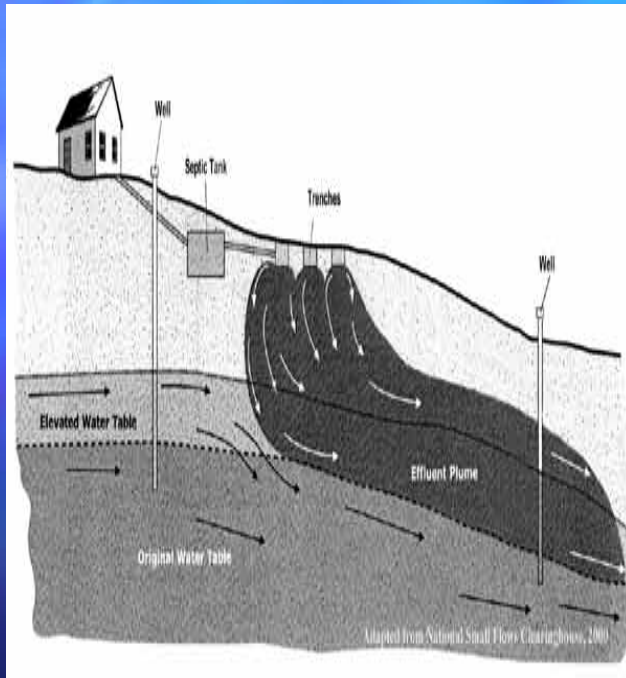
- ❏ Inspect your system (every 1-3 years) and pump your tank (as necessary, generally every 3-5 years).
- ❏ Use water efficiently.
- ❏ Don't dispose of household hazardous wastes in sinks and toilets.

Things to Keep in Mind: (cont'd)



- ❑ Plant only grass over and near your septic system. Roots from nearby trees or shrubs might clog and damage the drainfield.
- ❑ Don't drive or park vehicles on any part of your septic system. Doing so can compact the soil in your drainfield or damage the pipes, tank, or other septic system components.

Things to Keep in Mind: (cont'd)



- ❏ Elevated Water Table or Septic Systems not Maintained can Cause Effluent Plume to Drain into Well Water

Water Quality Problems



Estuaries



Groundwater



Shellfish Beds



Impaired Waters





EPAs Voluntary Guidelines for Management of Onsite/ Decentralized Wastewater Systems

Guidelines

- Purpose: Raise the level of performance of onsite/decentralized wastewater systems through improved management programs
- Contains a set of model programs, based on a comprehensive approach that relies on coordinating the responsibilities and actions among the state, tribal or local regulatory agency, the management entity or service provider and the system owner(s).
- Voluntary Program with a Flexible Framework so States, Tribal or Local Regulatory Agencies can Tailor their Programs to the Needs of the Community

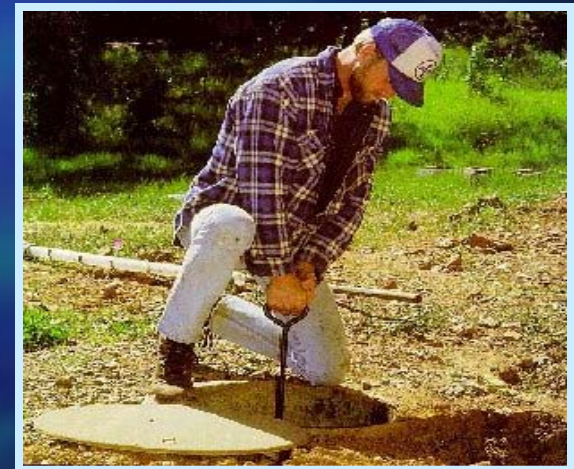
EPAs Voluntary Guidelines for Management of Onsite/ Decentralized Wastewater Systems

1. System Inventory and Awareness of Maintenance Needs
2. Management through Maintenance Contracts
3. Management through Operating Permits
4. Utility Operation and Maintenance
5. Utility Ownership and Management

MANAGEMENT MODEL 1

Homeowner Awareness of Maintenance Needs

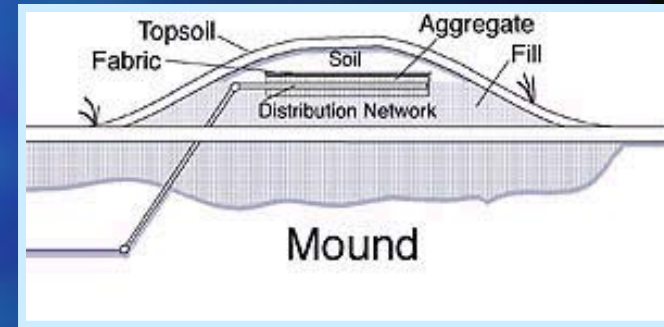
- Covers conventional septic systems
- Local agency is aware of system locations
- Septic Systems are owned and operated by individual property owners
- Areas of low environmental sensitivity (no restricting site or soil conditions such as shallow water tables, or drinking water wells)
- Homeowner responsible for maintenance



MANAGEMENT MODEL 2

Maintenance Contracts

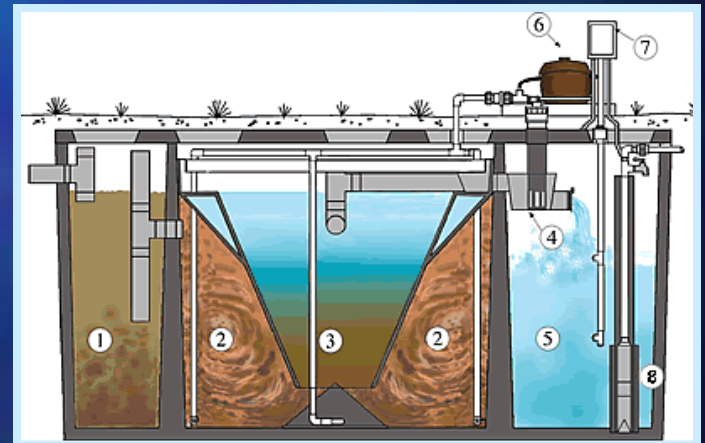
- Certain systems given more attention
- Allows for more complex system options
 - e.g., mounds, pressure dosed systems
- Maintenance contracts with trained service providers to perform timely maintenance



MANAGEMENT MODEL 3

Operating Permits

- Renewable operating permits
- Regular reporting and monitoring
- Appropriate for greater environmental sensitive areas (shellfish growing waters) and large commercial systems (e.g. school's system)
- Establishes a system inventory database and tracking of the system for monitoring



MANAGEMENT MODEL 4

Responsible Management Entity Operation and Maintenance

- Management entity responsible for operation and maintenance
 - Systems still owned by homeowners
- Ensures consistent performance
- Areas of moderate to high environmental sensitivity that require reliable septic system operation and maintenance for resource protection
- Professional operation and maintenance services through responsible management entity (RME)
- Homeowner owns septic but pays company/RME to control all aspects of its operation



MANAGEMENT MODEL 5

Responsible Management Entity Ownership and Management

- Same as Model 4, except RME is owner
- Areas of greatest environmental sensitivity
- Preferred management program for cluster systems serving multiple properties (e.g. subdivision)
- RME owns system and maintains every aspect
- Homeowner pays a fee each month (like phone bill, central sewer bill, etc.)
- Professional management of all activities
 - Analogous to centralized collection and treatment
- Reduces oversight by regulatory agency



Why Should I Maintain My Septic System?

- ☞ Protect Public Health
- ☞ Protect the Environment
- ☞ Maintain Property Value of Home-must be functioning properly to sell

Management's Advantages



EEOCs Goal

- Homeowners will take it upon themselves to manage their septic systems
- Service it to protect our drinking water
- Septic Systems are linked to drinking water contamination; E.coli found in well water
- Adopt Voluntary Guidelines-which takes on the maintenance responsibility

Interested in Testing Your Home's Water Quality?

Water Quality Testing of Well Water:

- Kits Made Available at EEOC and County Health Departments
- Take a Sample of Well Water
- Mail to Lab
- \$40 Charge
- EEOC will provide help for those needing additional assistance

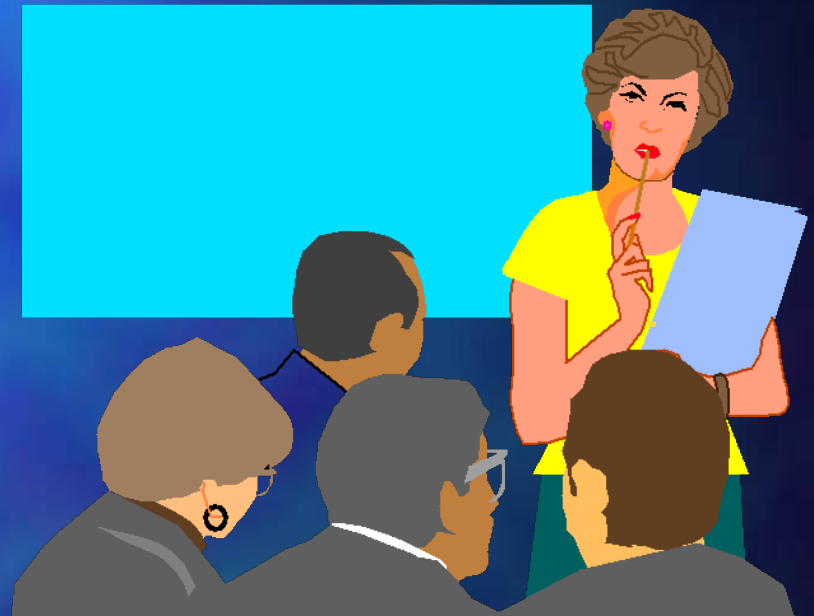
EEOC Resources Available

Location: Ephesus Baptist Church

Open: Tuesday-Saturday

Resources Available:

- Resource Center
- Hotline
- Website
- Opportunity to Win Free Water Quality Testing
- Opportunity to Win Free Septic System Maintenance
- Educational materials
- Technical Assistance
- List of Funding Options in Middle Peninsula, VA
- Workshops



Workshop #2-Another Step Towards Improving Our Community

Date: April 24th, 2004

Time: 9am

Location: Ephesus Baptist Church

- Septic System Information
- Guest Speakers; Dr. Bob Rubin-NC State University, Bay Aging
- Chance for Free Maintenance of System (Free Pump)
- Free Water Quality Testing Door Prize
- Free Dental Screening (MCV School of Dentistry)
- Free Dental Supplies and Instructions
- Free Lunch Provided



Summary

Septic Systems can be effective wastewater treatment systems when properly MAINTAINED, therefore:

- PUMP system every 3-5 years
- INSPECT system every 1-3 years (ensure it's working properly)
- PROTECT system-do not put hazardous materials in system

Quiz-Which Model Program Requires the Homeowner to Manage their own system?

- A. Level One
- B. Level Two
- C. Level Three
- D. Level Ten
- E. None of the above

Answer "A": Model Program- Level One

Model Program 1-System Inventory and Awareness of Maintenance Needs

- Septic Systems are owned and operated by individual property owners
- Homeowner responsible for maintenance

Quiz-How often should you pump your septic system?

- A. 1-2 years
- B. 6-10 years
- C. 1-3 years
- D. 3-5 years

Answer "D": 3-5 years

-Chesapeake Bay Act Recommends that Residents Pump Septic Systems Every 5 Years

-According to the EPA, Properly Sized Tanks Can Accumulate Sludge for at Least 3 Years

Are You Experiencing Septic System Problems??

Please see me following the presentation; help is available!!

- Important to Inform Me of Your Problem
- Need Statistics to Request Additional Funds to Rehab Septic Systems in Our Community
- Voluntary Process





For More Information Contact:

Ephesus Environmental Outreach

(804)843-4806

www.ephesusbc.eeoc/index/html

Questions???



Ephesus Environmental Outreach



Workshop-“Another Step Towards Improving Our Community”

9am, April 24, 2004

Ephesus Baptist Church
32681 King William Highway (Rt 30)
West Point, VA 23181
(804)843-4806

AGENDA

Ephesus Environmental Outreach will provide a series of free workshops to provide resources, educational materials, and assistance to the community.

- Septic System Seminar
- Assistance for Residents with Septic Problems
- Guest Speakers (NC State Professor/EPA Visiting Scientist, Bay Agency for Aging, VA Dept of Health)
- Opportunity to Win a Free Septic System Pump
- Free Lunch and Giveaways
- Kids Environmental Workshop
- Free Dental Screening-MCV School of Dentistry and Dr. Lisa Curry, Williamsburg, VA

Environmental Outreach Press Release Examples

Pre-Event:

[insert organizations name] to hold [insert type of program, e.g. Environmental] Program: The [insert organizations name] will hold its environmental outreach program on [date] at [location] at [time]. The Environmental Outreach Program is designed to reach out to underserved and minority residents to provide wastewater management education and assistance to rural communities. Residents with septic system problems are encouraged to attend. For more information, please contact [contact name] at [contact number].

Post Event:

Community Residents Attend [organization name] Environmental Outreach Program: The [organization] hosted [insert number] residents on [date] at an Environmental Outreach Workshop entitled [title of workshop]. The [organization name] is an organization committed to educating and improving the onsite wastewater management conditions of disadvantaged residents. The guest speaker for the workshop was [name of guest speaker] from [agency]. Our next workshop entitled [name of workshop] will be held [date]. For more information about [organization] please visit our website [web address] or call [phone number].



Ephesus

Environmental Outreach

“Another Step Towards Improving Our Community” Workshop #2

**Ephesus Baptist Church
April 24, 2004
9am**

9am Part 1-Workshop (Conference Room A)

- I.** Welcome-Rana Graham
- II.** Septic System 101-Rana Graham
- III.** Speaker-Dr. Bob Rubin, NC State University
- IV.** Speaker-Wayne Talley, Bay Aging
- V.** Q&A-Panel
- VI.** Break Out Session/Homeowner Interaction-Outreach Committee
- VII.** Kids Workshop Presentation
- VIII.** Speaker-Dr. Lisa Curry, Curry Dental Center, Williamsburg, VA
- IX.** Closing-Pastor Morris L. Randall

9am Part 1-Youth Workshop (Sanctuary)-Ione Walker, Bethel Restoration

11:30am Part 2-Dental Screening (Conference Room B)-MCV School of Dentistry, SNDA

Noon-Lunch