SepticSmart- Panel Discussion



Kristine Rendon, MDEQ
Lucus Pols, Kalamazoo County Environmental Health
Danielle Gerdes, Scott's Excavating
Beth Clawson, MSU Extension
MDNR Content
Dave Cotton for MOWRA



Who here has heard about SepticSmart?

What is SepticSmart?





U.S. Environmental Protection Agency

- Annual promotion through EPA focusing on outreach activities to encourage homeowners and communities to care for and maintain their septic systems.
- During SepticSmart week, EPA seeks to inform homeowners on proper septic system care and maintenance, assist local agencies in promoting homeowner education and awareness, and educate local decision makers about infrastructure options to improve and sustain their communities.

For more information visit:

https://www.epa.gov/septic/septicsmartweek

Or

https://www.michigan.gov/deqsepticsmart



SepticSmart in Michigan

4



Save the Date: September 16-20, 2019

septicsmart



www.epa.gov/septic/septic-systems-autreach-t

www.michigan.gov/aegsephicsmart

The U.S. EPA- in conjunction with federal, state and local governments, and private sector partners-will kick off the annual SepticSmart Week (September 16-20, 2019) to encourage American homeowners and communities to properly maintain their septile systems. For more information visit; <u>www.cna.gav/keplic</u>

Michigan has a vision to protect and promote the wise use of its globally unique water sources. Proper septic system maintenance protects public health, the environment, and saves the homeowner money through avoided costly repairs. The Septistionart Program edicates homeowners about proper septic system care and maintenance all year long. In addition, it serves as an online resource for industry practitioners, local governments, and community organizations, providing access to took to edicate clients and residents.



MDEQ Minute Video: Septic Systems

The MDEQ Onsite Wastewater Program explains how septic systems work and why proper maintenance is important to the protection of public health, our Great Lakes and the environment.

You can find this video on YouTube at https://youtu.be/JNQpFo7Cx4A



SepticSmart Postcard

Reminder to get your tanks pumped. Space available for personal business information.



Do Your Part Get SepticSmart Flyer

Protect It and Inspect It. Reminding homeowners to have system inspected every three years and tanks pumped every three to five years.



SepticSmart Dos and Don'ts for an Advanced Treatment Unit (ATU)

Flyer explaining what is an ATU and why would a homeowner need an ATU versus a traditional septic system? Additionally, explains what the required maintenance on an ATU with a list of Dos and Don'ts.

SepticSmart in Michigan



A Homeowner' Guide to Septic Systems

Download and print an 8-page informational booklet to help a homeowner understand what a Septic System is and the importance of maintaining this system.



New Homebuyer's Guide to Septic Systems

A double-sided print-out into a four-page brochure for basic information of owning a home with a septic system.

Space available for personal business information.



Proper Landscaping on and Around Your Se

A flyer to help educate homeowners on the importance of keeping your sept system out of harm's way. Landscaping do's and don'ts over your drainfield



On a septic system? When is the last time you thought about it?

oor Hanger Brock

Can be used to notify homeowners about inspecting their septic tank and th importance of pumping. With five Septic Tips on the back. Comes in door hanger style or a mail insert style.



Top 10 Ways to Be a Good Septic Owner

Checklist handout to educate homeowners of how to maintain their septic systems by listing the top 10 ways to ensure a healthy system.



SepticSmart Week Social Media Guide

Contains material and information you can use to advertise and promote SepticSmart Week. Includes basic social media messages and outreach matips and methods to track messages, and news release examples.

Visit: www.michigan.gov/septicsmart or www.epa.gov/septic for more information.

This message is promoted through many free printable resources through EPA...



ON BEHALF OF THE PEOPLE OF MICHIGAN

I, Rick Snyder, governor of Michigan, do hereby proclaim September 17-21, 9018

SepticSmart Week

WHEREAS, proper septic system use and routine care are vital to protecting public health, preserving our highly valued groundwater, lakes, streams and waterways, and avoiding costly repairs that can result from neglect; and,

WHEREAS, over 1.3 million septic systems in Michigan treat wastewater from homes and businesses, and.

WHEREAS, wastewater professionals in the state of Michigan use their expertise in the design, installation, maintenance, and regulation of septic systems; and,

WHEREAS, the U.S. Environmental Protection Agency's SepticSprogram used by Michigan health officials educates homeowners about need for proper septic system use and routine maintenance; and,

WHEREAS, residents and the environment of Michigan greatly properly designed, installed, operated, and maintained septic sy

NOW, THEREFORE, I, Rick Snyder, Governor of proclaim September 17-21, 2018 as Septic Smart Weel



Governor Snyder signed the State of Michigan SepticSmart Week 2018 Proclamation.







Proclamation

WHEREAS, part of the mission of the Michigan Onsite Wastewater Recycling Association is to promote the proper design, construction, operation and maintenance of onsite wastewater systems, referred hereafter as septic

WHEREAS, proper septic system use and routine care are vital to protecting public health, preserving our highly valued groundwater, lakes, streams and waterways, and avoiding costly repairs that can result from

WHEREAS, nearly 1,3 million of septic systems in Michigan treat

wastewater from homes and businesses; and
WHEREAS, wastewater professionals in the state of Michigan use their
expertise in the design, installation, maintenance and regulation of septic

whereas, the U.S. Environmental Protection Agency's SepticSmart program used by Michigan health officials and professionals does edu-homeowners about the need for proper septic system use and routine

WHEREAS, residents and the environment of Michigan benefit from properly designed, installed, operated, and maintained septic systems:

NOW THEREFORE, I, Larry D. Stephens, on behalf of the Michigan Onsite astewater Recycling Association do hereby proclaim the week of September 17-21, 2018 as

SepticSmart Week

The Michigan Onsite Wastewater Recycling Association urges all people to join cial observance and do all they can to promote this worthy m



Lang D Lyl Larry D. Stephens, PE, President



WHEREAS, proper septic system use and routine care are vital to protecting public health, preserving our highly valued groundwater, lakes, streams a waterways, and avoiding costly repairs that can result from neglect; and

WHEREAS, nearly 1.3 million of septic systems in Michigan treat wastewater from homes and businesses; and

WHEREAS, wastewater professionals in the State of Michigan use their expertise in the design, installation, maintenance and regulation of septic systems:

 $\textit{WHEREAS}, the U.S. \ Environmental \ Protection \ Agency's \ Septic Smart \ program$ used by Michigan health officials educates homeowners about the need for proper septic system use and routine maintenance; and

WHEREAS, residents and the environment of Michigan benefit from properly designed, installed, operated, and maintained septic systems:

NOW THEREPORE, I, Dave Snyder, President of the Michigan Septic Tank

SepticSmart Week

and on behalf of the Michigan Septic Tank Association. I urge all people to join us in

Signed this 8/28/18 Dave W. Ingola Dave W. Snyder (MSTA President)



Proclamation

public health, preserving our highly valued groundwater, lakes, streams and waterways, and avoiding costly repairs that can result from neglect; and

WHERE 45. Michigan has over one million oneits sentic evertems that treat

WHERE.45, Michigan Conservation Districts are the local providers of natural arce management services that help our citizens conserve their lands and our conment for a cleaner, healthier, economically stronger Michigan.

WHEREAS, the U.S. Environmental Protection Agency's SepticSmart program is used by Michigan Conservation Districts to educate homeowners about the need for proper

designed, installed, operated, and maintained septic systems

NOW THEREFORE, the Michigan Association of Conservation Districts do

SepticSmart Week

The Michigan Association of Conservation Districts and the 75 Conservation District

arthur Belon

Art Pelon, President Michigan Association of Conservation Districts August 31, 2018





WHEREAS, proper septic system use and routine care are vital to protecting public health, preserving our highly valued groundwater, lakes, streams and waterways, and avoiding costly repairs that can result from neglect; and

WHEREAS, nearly 1.3 million septic systems in Michigan treat wastewater from

WHEREAS, Environmental Health professionals of Michigan use their expertise in the design, installation, maintenance and regulation of septic systems; and

WHERE.4S, the U.S. Environmental Protection Agency's SepticSmart program used by Michigan health officials does educate homeowners about the need for proper septic

WHEREAS, residents and the environment of Michigan benefit from properly designed, installed, operated, and maintained septic systems:

NOW THEREFORE, I . Connor Wickham, on behalf of the Northern Michigan mental Health Association do hereby proclaim the week of September 17-21, 2018 as

SepticSmart Week

The Northern Michigan Environmental Health Association urges all people to join us in this special observance.

Signed this September 12, 2018

Jane Will





Additional Support Through Local Proclamations...

MOWRA, MSTA, MACD, NMEHA

Statewide Promotional Effort!

Supported by multiple agencies:

- Seminars
- News Releases
- Social Media
- Mass Emails
- Mass Mailings
- Webinars
- Linking to additional resources on Webpages
- Handouts

Local Health Department Support

Lucus Pols: Kalamazoo County Environmental Health



Kalamazoo County Environmental Health Septic Smart Week Outreach

Lucus Pols, REHS, Environmental Health Supervisor



2018 Well and Septic 101

- First year doing a 101 Seminar
- Geared to homeowners, builders, excavators, realtors
- What information is really important?
- Logical choice was during Septic Smart Week!





Advertising

- Facebook
- Sent with septic and well permits and finals
- Sent with complaints!
- Libraries, township halls
- Flyers and Postcards



Kalamazoo County Health & Community Services - HCS

@KalamazooCountyHCS

Home

About

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Reviews

Videos

Posts

Community

Info and Ads



Kalamazoo County Health & Community Services - HCS September 18 - 🚱

WELL AND SEPTIC 101

DATE: 09/19/2018 TIME: 6PM Registration is from 5:30-

Registration is from 5:30-6:00 Conference Room A

Kalamazoo County Expo Center Conference Room A 2900 Lake St, Kalamazoo, MI



Attention homeowners, realtors, builders or anyone else who wants to learn the basics about

water wells and sewage treatment systems:

Kalamazoo County Environmental Health is hosting an informational seminar to educate the public about the function, maintenance and regulations regarding onsite water supply and sewage treatment systems.

Join us to learn the answers to these questions and

- · Where does your drinking water come from?
- . How often should I test?
- · Where does my gray water and black water go?
- How often should I pump my septic tank?
- . What is the function of an alternator valve?

For more information contact us at:

Phone: 269-373-5337

E-mail: ehincoming@kalcounty.com

Dont Miss this Opportunity

If you are a homeowner and would like a drawing and brief consultation regarding your water supply or sewage treatment system during the Well and Septic 101 seminar, call to pre-register over the phone and we will provide you with any pertinent information that our office has available.

Call 269-373-5337

Kalamazoo County Health & Community Services is committed to providing equitable, culturally competent care to all individuals served, regardless of race, age, sex, color, national origin, religion, height, weight, marital status, political affiliation, sexual orientation, gender identity, or disability.







Evening Activity

- 6:00-8:00 PM
- All staff played a part!
- No RSVP's





Agenda and Topics Covered

- What is Environmental Health?
 - Food Safety, Land Water and Wastewater, Lab, Household Hazardous Waste
- What is a Sewage Treatment System?
 - Basics septic tanks and drainfields
 - Failure
 - Permitting and Inspection
- What is a Water Well/Groundwater Contamination?
 - Basics Water Well and components
 - Permitting and Inspection
 - Abandonment/Plugging
 - Groundwater Contamination
- Questions







U.S. Environmental Protection Agency www.epa.gov/septic

Onsite Wastewater www.michigan.gov/deqsepticsmart











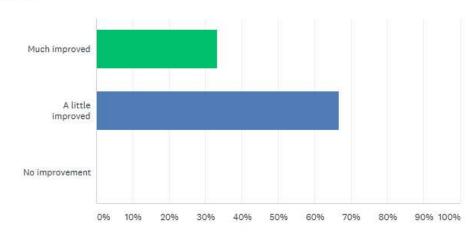


Results

- 22 attended
- Mostly homeowners
- Good questions
- New septic owners
- Survey Monkey (6 responses)

How much has your knowledge of Kalamazoo County Environmental Health's role in relation to Sewage Treatment Systems & Drinking Water Wells improved?

Answered: 6 Skipped: 0





Takeaway

- Will do it again this year
- Great to work with state partners
- Will create new advertising and begin sending out January





2019 Ideas

- Different activity
- Advertise even sooner!
- Videos (Animaker)







Septic Tank (ST) / Pump Chamber (PC)

Total ST Capacity Required (gallons): 1000

Pump / Pump Chamber: Not Required

Absorption System Requirements

Absorption System Type: Trenches

System Size (square feet): 800

Stone Requirements (Trenches / Drainbeds Only)

2 inches 6A stone level across 4 inch drain pipe

6 inches 6A stone below 4 inch drain pipe

Soil Cover over Absorption System

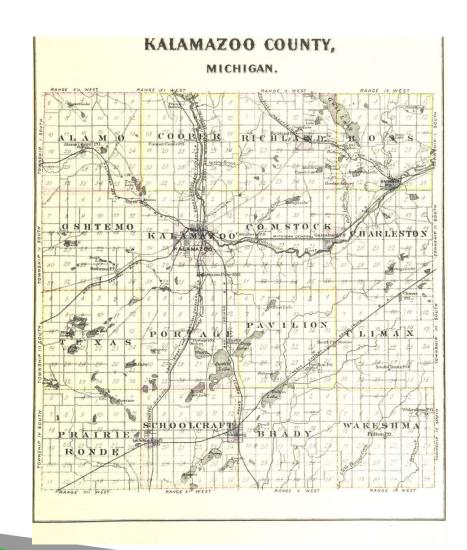
6 inches minimum 24 inches maximum

36 inches maximum bottom depth of absorption system





Thank you!





Pumper Perspective

Danielle Gerdes: Scott's Excavating

SEPTICSMART FROM A PUMPER'S PERSPECTIVE







USE OF SOCIAL MEDIA

• WHAT?

• WHEN?

• HOW / WHERE?



MESSAGE GOAL?

• (I) EDUCATIONAL

• (2) GENERAL ADVERTISING

• (3) COMPANY-SPECIFIC ADVERTISING

BENEFITS & ADVANTAGES

FREE ADVERTISING RESOURCES

• LIMITED TIME EXPENDITURE

• EASE OF USE

AESTHETIC APPEAL



PROBLEMS & HURDLES

LIMITED ONLINE RESPONSE



- LITTLE TIME TO ADEQUATELY PREPARE
 - LACK OF CONSISTENCY

SEPTICSMART WEEK 2019

PLAN OF ACTION & CHANGES

- (I) PLAN AHEAD
- (2) TAKE ADVANTAGE
- (3) CONSISTENCY, CONSISTENCY
 - (4) EXPAND WEB USE
- (5) MAKE USE OF THE CUTE FACTOR
 - (6) COMMUNITY AID HLF

SEPTICSMART FROM A PUMPER'S PERSPECTIVE

Thanks for listening!

Departmental Support

Michigan Department of Natural Resources: Parks and Recreation



Be wastewater smart!

Chemical-based tank deodorizers containing formaldehyde, metals or other harmful chemicals are a major cause for concern in wastewater disposal

Harsh chemicals destroy beneficial microorganisms that break down sewage waste.

> Formaldehyde is an EPA-recognized carcinogen.

Chemical presence in wastewater can cause soil and groundwater contamination, septic system failures and threaten nearby surface waters and water supply wells.

Restoration of contaminated soils and water is expensive and time consuming.

If a septic system fails, we may be forced to close the sanitation station until the problem can be corrected.

To prevent future problems, please read **what you can do** to help us control the hazardous chemicals entering our wastewater systems.



More info at michigan.gov/stateparks



Campers, are your deodorizers safe?



Here's what you can do:

- Use restroom facilities in parks and rest stops (while traveling) as often as possible.
- Read labels carefully and use biodegradable (enzyme or bacterialbased) tank deodorizers only.
- Follow deodorizer label directions and add only what is recommended.
- Empty holding tanks only when they are full to decrease the negative chemical effects on septic systems.
- Frequent cleaning and properly maintaining your black and grey tanks will help minimize odors.
- Tell other campers and boaters about using only biodegradable (enzyme or bacterial-based) tank deodorizers.



In-Person Campaign

New Policy









Online Campaign

Memorial Day



Independence Day







Additional Online Resources

MICHIGAN.GOV

THE DEPARTMENT OF

NATURAL RESOURCES

THINGS TO DO PLACES TO GO / STATE PARKS

DONE / PLACES TO GO / STATE PARKS

VERY TOPICS CONTACT US DOME BUSINES Q SEARCH

REY TOPICS CONTACT US DOME BUSINES Q SEARCH

REY TOPICS CONTACT US DOME BUSINES Q SEARCH

REY TOPICS CONTACT US DOME BUSINES Q SEARCH

NATURAL RESOURCES

MANAGING YOUR RESOURCES

DNR / PLACES TO GO / STATE PARKS

Campers, are your deodorizers safe?

Adding chemical-based deodorizers to sewage holding tanks in campers may result in the pollution of soil and groundwater, corrosion of pipes and tanks, and the production of toxic furnes.



Here's what you can do:

- Use restroom facilities in parks and rest stops (while traveling) as often as possible.
- Read labels carefully and use biodegradable (enzyme or bacterial-based) tank deodorizers only.
- Follow deodorizer label directions and add only what is recommended.
- Empty holding tanks only when they are full to decrease the negative chemical effects on septic systems.
- Frequent cleaning and properly maintaining your black and grey tanks will help minimize odors.
- Tell other campers and boaters about using only biodegradable (enzyme or bacterial-based) tank deodorizers.

Be wastewater smart!

- Chemical-based tank deodorizers containing formaldehyde, metals or other harmful chemicals are a major cause for concern in wastewater disposal.
- · Harsh chemicals destroy beneficial microorganisms that break down sewage waste.
- · Formaldehyde is an EPA-recognized carcinogen.
- Chemical presence in wastewater can cause soil and groundwater contamination, septic system failures and threaten nearby surface waters and water supply wells.
- Restoration of contaminated soils and water is expensive and time consuming
- If a septic system fails, we may be forced to close the sanitation station until the problem can be corrected.
- To prevent future problems, read labels carefully and avoid harsh chemicals when possible. Learn more with the resources below.

Additional Resources:

- Safe Wastewater Disposal for RV, Boat, and Mobile Home Owners and Operators
- Do Your Part, Be Septic Smart
- Onsite Wastewater
- SepticSmar
- RV Holding-tank Treatments & Deodorizers in Septic Systems
- Chemical Toilet Products Advisory for Consumers

RELATED CONTENT

Love to run? Tell us your favorite routes!

Gift Cards

These Goods are Good for Michigan

Recycling in State Parks

Friends of the State Parks



Operation & Maintenance of Large Onsite Sewage Treatment Systems

In the Classroom



Future Goals

- Continue in-person campaign for 2019
- Expand social media outreach efforts
- Engage the public and RV industry at upcoming events
- Expand classroom opportunities for operation and maintenance of critical infrastructure

Academia Support

Beth Clawson: MSU Extension



Septic safe Week 2018:

Actions and Support

Beth Clawson, MSU Extension



Online webinar for homeowners

Onsite Sewage Treatment Webinar:

Maintaining Your System

- ♣ Protect The Environment
- ♣ Protect Your Health
- ♣ Protect Your Investment

Terry Gibb & Beth Clawson Extension Educators



- Free registration
- Three parts
 - Construction and operation
 - Maintenance
 - Rural homeowner wellhead protection



Well and Septic 101 event sponsored by Kalamazoo County

WELL AND SEPTIC 101

DATE: 09/19/2018

TIME: 6PM

Registration is from 5:30-6:00

Location:

Kalamazoo County Expo Center

Conference Room A

2900 Lake St, Kalamazoo, MI





Attention homeowners, realtors



First Annual!





Kinawa Middle School Science Week -

Okemos

- Septic System operation to demonstrate decomposition for Middle School Youth
- Presented a brief lesson to the entire Grade 5 school science classes
- Played a quiz game of what they just learned



Jeopardy Decomposition

End



Association Support

Dave Cotton: Michigan Onsite Wastewater Recycling Association

Michigan Onsite Wastewater Recycling Association - MOWRA

Dave Cotton – President Ron Lindsay – Vice President Matt Johnson – Secretary/Treasure Larry Stephens – Past President

What is MOWRA

- A private non-profit organization made up of onsite industry professionals
- An Affiliate of NOWRA the National Onsite Recycling Association

Why is There MOWRA

Statement of Purpose

To bring together all of the Onsite Wastewater Professionals in Michigan (regulatory, academic, research, testing, design, consulting, manufacturing, installation, and servicing) to form an organization for the purpose of promoting and improving onsite waste water treatment disposal and management practices which will be safe, effective, ecologically sound, and economically feasible.

Why is There MOWRA

Statement of Purpose (cont)

□ To promote the development of more uniform technically based onsite practices and regulations across the state.

To provide a state wide forum for evaluation of codes and regulations, formulation and revising standards and practices and education the entire onsite wastewater profession.

Why is There MOWRA

Statement of Purpose (cont)

To collect informational resources and <u>provide</u> for meetings, tours, and other methods of <u>information exchange.</u>

What Has MOWRA Done

- We have actively supported the MOWC since our inception.
 - We brought you the Wednesday night buffet
- We were active supporters of the Novi Training Center.
- We have been at the table as a stakeholder in State-Wide Sanitary Code Legislation efforts.

What Has MOWRA Done

- We set up and sponsor field trips to tour active alternative treatment systems. During Septic Smart Week!
- We were a major contributor to MSU Extension for the development of a homeowner video. Something each of you can share with your homeowner client.

Out of Sight Not Out of Mind

https://www.michigan.gov/deq/0,4561,7-135-3313 71618 51002-468066--,00.html

What is MOWRA Doing

- Developing a Basics of Onsite Wastewater Systems course for onsite professional with plans to provide it in at least 6 locations across Michigan.
- Remaining active in MOWC.
- Staying engaged in Legislative action affecting our industry.
- Being involved with NOWRA and other State Affiliates.

What can YOU DO?

- □ Join MOWRA for \$85 per year.
 - Provides full membership to NOWRA (a \$10 savings)
 - Talk to Matt Johnson, or
- Go to the Web site at MOWRA.org



Any Questions for our Panel?

Where Do We Go From Here?

- Give us your comments!!
 - Fill out the SepticSmart 2019
 Questionnaire!!
- Check out our DEQ table here for additional resources.
 - Support SepticSmart week and get your local governments and agencies to proclaim SepticSmart week 2019!!

Who wants to share?



How did you hear of SepticSmart?



Did you participate in SepticSmart Outreach Activities in 2018?



What printed products would make outreach easier for SepticSmart week?



Do you have any ideas to help promote SepticSmart 2019?

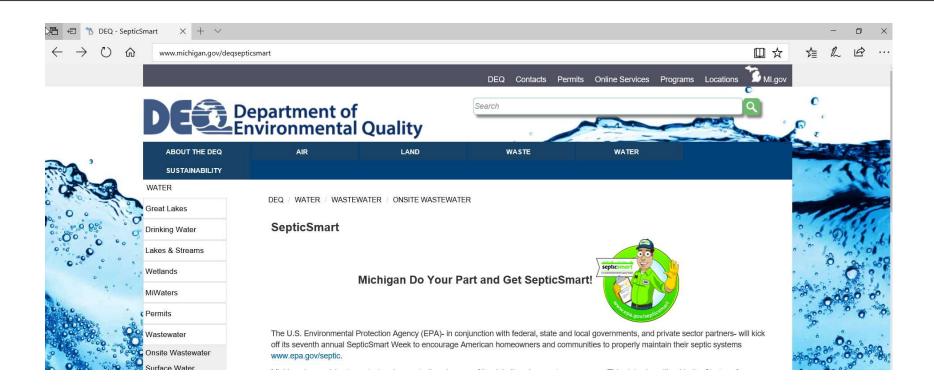


Any topic ideas for a new MDEQ minute video for SepticSmart 2019?

What are the available resources?

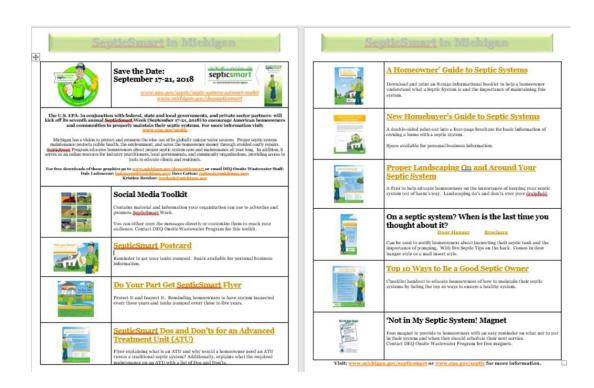


www.michigan.gov/deqsepticsmart



Social Media Toolkit





FREE Printable Resources!!





SepticSmart Postcard

Do Your Part, Be SepticSman

The Do's and Don'ts of Your Septic System

Learn these simple steps to protect your home, health, environment and property



Do:

 Have your system inspected (in general) every three years by a licensed contracto and have the tank pumped, when necessary, generally every three to five years.

Think at the Sink:

Don't:

septicsmart

 Pour cooking grease or oil down the sink or toilet.

- Rinse coffee grounds into the sink.
- Pour household chemicals down the sink or flush them

Do:

- Eliminate or limit the use of a garbage disposal.
- Properly dispose of coffee grounds 8
- Put grease in a container to harden before discarding in the trash.

Don't Overload the Commode:

Don't:

 Flush non-degradable products or chemicals, such as feminine hygiene products, condoms, dental floss, diapers, cigarette butts, cat litter, paper towels, pharmaceuticals.

Do:

· Dispose of these items in the trash can!

Shield Your Field:

Don't:

- Park or drive on your drainfield. The weight can damage the drain lines.
- Plant trees or shrubs too close to your drainfield, roots can grow into your system and clog it.

Do:

 Consult a septic service professional advise you of the proper distance for planting trees and shrubs, depending your septic tank location.

Don't Strain Your Drain:

Don't

 Concentrate your water use by using your dishwasher, shower, washing machine, and toilet at the same time.
 All that extra water can really strain your septic system.

Do

- Stagger the use appliances. The especially in the second control of the second cont
- pump

The Do's and Don'ts of your Septic System

SepticSmart Dos and Don'ts for an Advanced Treatment Unit (ATU)



What is an ATU?

Advanced Treatment Units (ATUs), referred here to as an individual residential system, are small biological treatment systems used to treat wastewater to a higher degree than a traditional septic system.

Why would I need or want an ATU versus a traditional septic system?

ATUs are used in many states to achieve a higher-quality wastewater than what exits traditional septic tanks. In fact, they are necessary in some areas — either because of the sensitivity of the environment, or because of site conditions. ATUs are also designed to reduce nutrient loadings, whereas traditional septic systems are not.

What is the required maintenance?

As with all septic systems, an ATU's proper functioning relies on regular maintenance. Due to its advanced components, an ATU needs more maintenance than a traditional septic system.

To ensure proper functioning, most states require annual operation, maintenance, monitoring and reporting as a requirement of the homeowner's septic permit. A maintenance provider should perform the services. Contact the ATU manufacturer for information on maintenary providers. The ATU manufacturer trains maintenance providers to a they are familiar with the manufacturer's treatment system.

In addition to the *Dos and Don'ts of Septic Systems*, ATUs have additional dos and don'ts because of their advanced parts.

Follow Septic Sam's ATU dos and

Don't

- Turn off any air supply device, alarm or electrical component of the system.
- · Bypass the system.
- Modify, cover or move any system components without prior approval from the service provider.
- Pump the ATU without service provider approval or supervision.

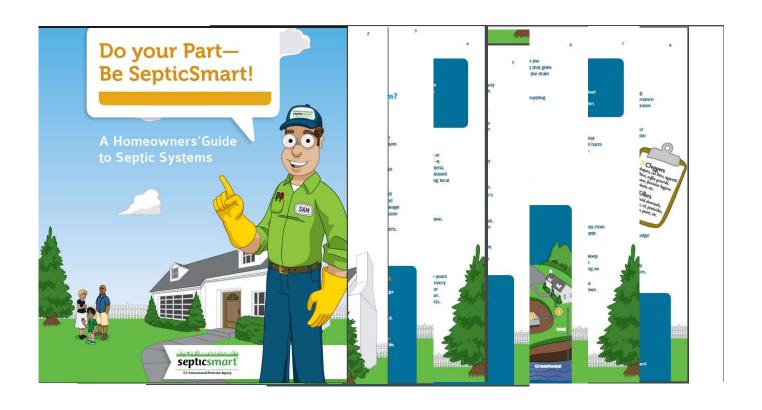
Do:

- Use soapr low-sur phos
- Fi

Do's and Don't for an ATU

For mo

Guide to Septic Systems



New Homebuyers Guide

Does my new home have a septic system? How do I find it?

- You can find your septic system by:

 Looking at the "as built" drawing for your home"s septic system, which you can request from your looking at the "as built" drawing for your home"s respite system, which you can request from your looking your yord for inspection cops, lids, or manhale covers;

 Checking your yord for inspection cops, lids, or manhale covers;

 Working with a septic system survice providey, who can help locate the system; and,

- Asking the seller or realtor.

How does a septic system work?

- 1. All water runs out of your house from one main drainage pipe into a septic tank.
 2. The septic tank is a buried, water-tight container. Its job is to hold the wastewater long enough for solids to settle to the bottom (sludge) while the fats, all and grease float to the
- top (scum).

 3. For conventional septic systems, liquid wastewater exits the tank and is spread evenly throughout the drainfield, usually through a distribution bax. Systems with more advanced. treatment may have an additional come onent between the septic tank and drainfield.



- Once in the drainness, the vastewater percolates into the soil, which reclaims the water for future reuse by naturally removing harmful bacteria, viruses, and some nutrients.
- This process may vary based on the site conditions of your property (e.g., soil type, proximity to vater). A septic system service provider and your septic system's "as built" drawings will be able to tell you what type of system is on the property.

How can I be sure that my septic system is working correctly?

Equing a home is one of the biggest investments you will make, as you need to evoid any expense often you purches the home. All this pro-frience, the again system is usual to replace a serious purchase the home. All this pro-frience, the again system is usual to replace as you would be an in good condition when you buy the bone. How the system inspected by a septic system extrine provider before you purchase a home. Hipsections may be required by your food or state government or by your mortgoge lender. Inspection results on help your decided if the lone is a light for you.

What should happen during a septic system inspection?

The inspector will check for the following:

- Purpoing and maintenance records;
 The age of the seafic patien;
 Sludge levels and accum thickness in the tank;
 Sludge levels and accum thickness in the tank;
 Signs of lesslage, acchs a claw water levels in the tank choice the outer place;
 Signs of backing, such as straining in the tank choice the outer place;
 Signs of backing, such as straining in the tank choice the outer place;
 The destination is, intelligent of the outer place to the outer place;
 The destination has, to make sure definitions are reaching equal flow; and
 Audiolable records, to ensure the system complies with local regulations regarding function and location.

What can I do to help maintain my system every day?

The average lifespoin of a septic system is 15 to 40 years, but it can last longer if properly

- ntained! Think of the sink. Consider what you put into your toilet and sink and the impact it may have on your system. Many common household items can either clog your system or kill the
- microbes that treat the wastewater.

 "Claggers" include diapers, baby wipes, cat litter, cigarettes, coffee grounds, grease,
- and feminine hygiene products.

 "Killers" include household chemicals, gasoline, oil, pesticides, antifreeze, paint, and high amounts of anti-bacterial soaps and detergents
- The less water you use, the less your septic system has to work. Stagger the use of

iances, use high efficiency plumbing fixtures, and repair any leaks in your home. For more information, go to https://www.epa.gov/waterse

- Shield your feld.

 *Keep your can and anything heavier than your lawmower off your drainfield.

 *Eliminate or limit the use of a garbage disposal. This will significantly reduce the amount of fact, grease, and sould find rether you spetic pather and could day your disnifield.

 *Plant trees away from the disnifield since tree roots and day the feld and acous the system to fall.

 *Keep access weeter from imagenic, applicant artifully of chains of the disnifield since the sould be supported to the country of the state of t

What else can I do to help maintain my system?

A typical septic system should be inspected every three to five years by a septic system service provider. The tank should be pumped as recommended by the service provider or as required by your town, county, or state. Generally, you can plan to have the tank pumped approximately every three to five years. Just like changing the all in your car, preventive septic system maintenance will extend the life of your system for a small cost compared to the cost of replacing the system.

Your home's septic system should be inspected every three to five years as part of its routine four nome a segric system acoust be inspected every intere to me gleatic as por no a routine maintenance and pumped as necessary depending on the results of the inspection. The maintenance service pipically costs between \$250 to \$500, based on notionwide industry estimates. Maintenance costs are much more affordable compared to the expense of repaining or replacing a septic system which can cost thousands to tens of thousands of dollars. Contact all local septic system service provider who can provide a cost estimate specific to your area and needs. They can also provide you with more accurate information on how frequently to service and pump out your system.

How do I know if my septic system is not working properly? What do I do?

There are a few signs of a seatic system malfunction. If you discover any of these warning signs, call a

- indee are a ter's argar of a septic speem maintenion, in you assoured any or small evintum.

 septic system service provider immediately. One coil could some you thousands of dollars!

 "Wastewater backing up or gurgling into household drains.

 " A strong obser around the supplicit harker or denifielt between the control of the supplicit harker or denifield.

 " Bright green, spongy grass appearing on the drainfield.

If you are about to purchase a new home with a septic system, this homebuyer guide

This guide provides information homebuyers need to know before purchasing a home with a septic system (also known as an onsite wastewater system), how a septic system works, and the importance of having it inspected prior to purchasing a home. In addition, this guide provides information on everyday, preventative, and corrective maintenance for when you are living in your new home.

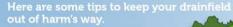
For additional information, contact your local health department, real estate agent





Proper Landscaping On and Around Your Septic System

The drainfield is a vital part of your septic system. Having the right landscaping on and around your system is important, as tree and shrubbery roots can grow into the drain lines. Also, other heavy items like cars and livestock can break drain lines. Strong roots and heavy items can cause the drainfield to fail. And if the drainfield fails, your system fails.



Locate your septic tank and drainfield. Then make sure the area is clear of:



- . Swing sets
- . Decks and patios
- · Sports courts
- Storage sheds
- . Sand boxes • Driveways

Plant native, drought-tolerant plants. These are some of the best for your septic system and its drainfield

septicsmart

SAM

- Fescue
- · Ornamental grasses
- · Wildflower meadow mixes

Groundcovers for sun:

- Bugleweed (Ajuga)
 Carpet heathers (Calluna Vulgaris)
- Cotoneaster (Cotoneaster)
- Ground ivy (Glechoma)
- . Kinnikinnick (Arctostaphylos)
- . Periwinkle (Vinca)

Groundcovers for shade:

- . Bunchberry (Cornus) * Chameleon (Houttuynia)
- Mosses
- Sweet woodruff (Galium Odoratum)
- Wild ginger (Asarum)
- · Wintergreen (Gaultheria)

Follow Septic Sam's landscaping do's and don'ts:

Don't:

- Plant a vegetable garden on or near the
- · Put plastic sheets, bark, gravel or other fill over the drainfield.
- · Reshape or fill the ground surface over the drainfield and reserve area. However, just adding topsoil is generally OK if it isn't more than a couple of inches
- . Make ponds on or near the septic system and the reserve area.

- · Plant grass or keep existing native vegetation. These are the best covers for your drainfield
- · Direct all surface drainage away from the septic system.
- · Use shallow-rooted plants (see plant list above). Tree and shrub roots can grow into the drainlines, clogging and breaking them.
- · Avoid water-loving plants and trees.
- . Make sure the tank lid is secure.

For more SepticSmart tips, visit www.epa.gov/septicsmart

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Door Hanger







Brochure

Top 10 Ways...

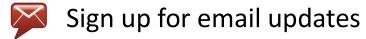




Any Questions?

Michigan Department of Environmental Quality

800-662-9278 www.michigan.gov/deqonsitewastewater





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