October 30, 2020

Michelle L Crawford
MDE Water Management Administration
Sediment, Stormwater, and Dam Safety Program
1800 Washington Boulevard
Suite 440
Baltimore, MD 21230-1708

Dear Ms. Crawford:

We have attached the report that covers the period of October 31, 2019 through October 30, 2020 for the Town of Emmitsburg's General Discharge Permit No. 13-IM-5500.

Please let us know if any additional information is required. Cathy can be contacted at 301-600-6316 or cwillets@emmitsburgmd.gov, and Zach at 301-600-6309 or zgulden@emmitsburgmd.gov

Sincerely,

Cathy Willets
Town Manager

Zachary R. Gulden, MPA
Town Planner

State of Maryland
MS4 Annual Report

October 31, 2019 - October 30, 2020

Prepared for

Town of Emmitsburg, Frederick County

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Town of Emmitsburg

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Public Education and Outreach Program

Minimum Control Measure (MCM) #1
Public Education and Outreach

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Public Education Outreach Plan is to implement and maintain a public education and outreach program and distribute educational materials to the Town's target audience in order to help reduce the discharge of pollutants caused by stormwater runoff.

Stormwater Management Best Management Practices (BMP) 1.1 - Public Hotline

- ***Requirement*:** Develop a process by which the public can report water quality complaints that must include a phone number.

- ***Action Plan*:** The Town has added a stormwater management page to their website, which can be located at http://www.emmitsburgmd.gov/planning_and_zoning/stormwater_mgmt_ms4.php. Material on how to report illicit discharges and contact information is provided. All stormwater related complaints are directed to the Town Planner. Also available on that page are links to the Stormwater Annual Progress Reports and other educational and environmental information. Pictures of the website page can be found in Section BMP 2.4 – Public Access. Please see the attached 2020 water quality complaint log.

2020 Stormwater Complaint Log

Date: 01/27/2020 **Caller:** 31 Provincial Parkway **Address:** 31 Provincial Parkway **Routed to:** Jimmy, Public Works	**Complaint:** Storm drain inlet near his house is clogged frequently.
Resolution Date: March 2020	**Comments:** Area around the drain is eroded and the drain & pipe is full of dirt. Town hired a contractor to regrade the area and install riprap stone at storm inlet. 4.5 tons of dirt/debris was removed from the inlet and pipe. **Cost to Town:** $4,324.00
Date: 09/03/2020 **Caller:** Zenas Sykes **Address:** Wheatley Drive **Routed to:** Eric Dodson, Frederick County	**Complaint:** The contractor constructing the new home on Wheatley Drive is dragging mud throughout the development. No protection for storm drain inlet.
Resolution Date: 09/21/2020	**Comments:** Eric responded that site control (curb inlets) will be installed with the builder's plans, which is in the approval process.

Date: 10/19/2020 **Caller:** Town Staff **Address:** 201 North Seton Ave **Routed to:** Eric Dodson, Frederick County & Kate Ansalvish, MDE	**Complaint:** Property owner had contractor excavate around his home's foundation in order to fix water leakage problem. Contractor dug up an old fuel oil tank, which they claimed was empty; however, the area had an odor of fuel oil. Water was pumped out of ditching where the fuel tank was found into the rear of the property, which had a visible film. Property owner also claimed they found coal ash.
Resolution Date: On-Going	**Comments:** Zach Gulden, Town Planner, investigated on 10/19/2020, and he did note the smell of fuel oil around the house. No film was noted in the ponding water. Eric responded that the home owner is exempt from storm water management and erosion & sediment control permits, because the disturbed area is less than 5,000 sq. ft. Town staff is waiting on a call back from MDE at the time of this report.

BMP 1.2 – Target Audience

- ***Requirement:*** Determine the target audience within the jurisdiction and develop materials to educate the audience on the impact of stormwater.

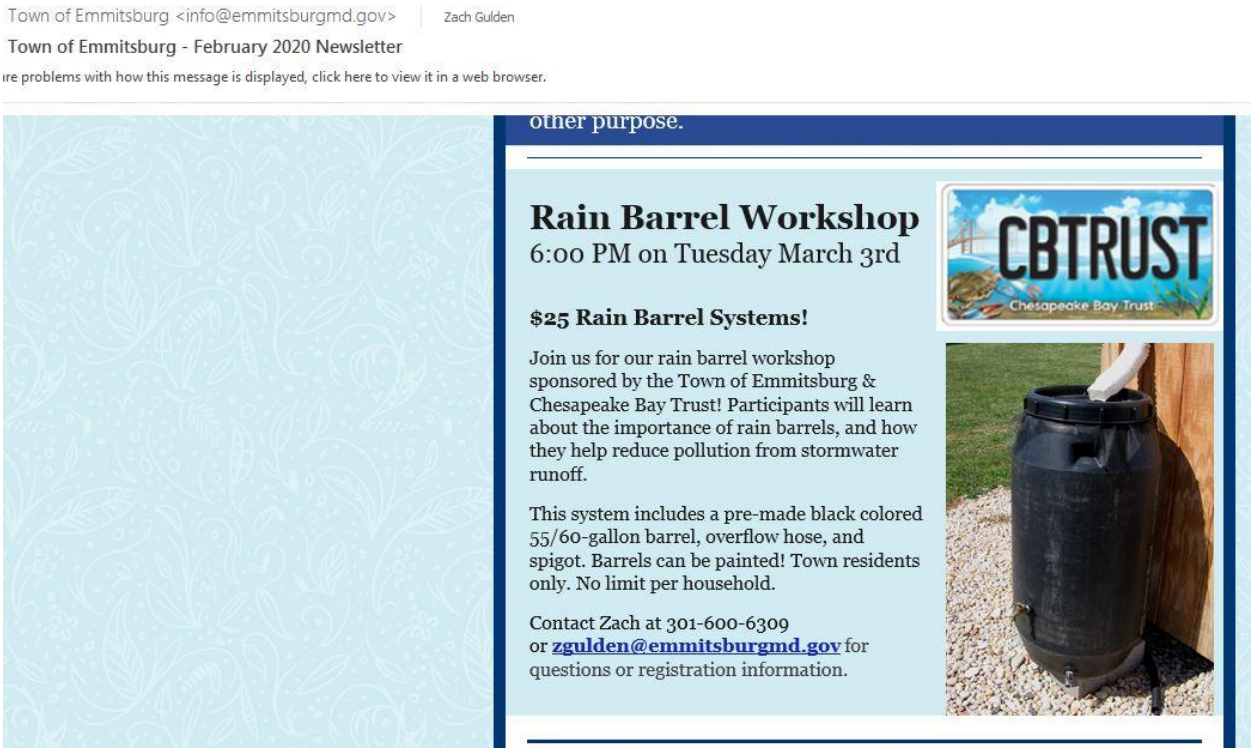
- ***Action Plan:*** The Town has identified residents, homeowner associations, elected officials, and municipal employees as the target audience groups. Educational materials can be found in section BMP 1.3.

BMP 1.3 – Distribution of Educational Materials

- ***Requirement:*** Distribute stormwater educational materials through newsletters, website, or other appropriate methods.

- ***Action Plan*:** Materials to educate the identified audience are distributed at the Town Office, website, cable channel 99 (local government channel), Facebook, YouTube, and through the Town's newsletter that is attached to quarterly water and sewer bills.

  Town Newsletter: The Town aims to publish stormwater articles and/or announcements in at least one newsletter every year. The electronic February 2020 newsletter included a reminder that the Town was hosting a rain barrel workshop.


Town of Emmitsburg <info@emmitsburgmd.gov> Zach Gulden

Town of Emmitsburg - February 2020 Newsletter

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other purpose.

Rain Barrel Workshop

6:00 PM on Tuesday March 3rd

CBTRUST Chesapeake Bay Trust

$25 Rain Barrel Systems!

Join us for our rain barrel workshop sponsored by the Town of Emmitsburg & Chesapeake Bay Trust! Participants will learn about the importance of rain barrels, and how they help reduce pollution from stormwater runoff.

This system includes a pre-made black colored 55/60-gallon barrel, overflow hose, and spigot. Barrels can be painted! Town residents only. No limit per household.

Contact Zach at 301-600-6309 or zgulden@emmitsburgmd.gov for questions or registration information.

Literature Rack in the Town Office: The Emmitsburg Resource Center is located in the front hallway of the Town office. The information rack can be found directly on the left when a member of the public walks in the front door (see photo). The Resource Center currently includes the following stormwater related items (among others):

- Emmitsburg Rain Barrel Program
- Composting: Do the Rot Thing
- Gardening With Native Plants
- Natural Household Cleaners
- Maintaining Your Lawn While Protecting Water Quality
- Harvesting Rainwater Using Rain Barrels
- Design and Construction of a Rain Garden
- Pet Waste Fact Sheet
- Only Rain in the Drain!

That this information is also located on our website.

Flyer Printed on 100% Recycled Paper

EMMITSBURG GRANT

In August 2019, the Town of Emmitsburg was awarded a $5,000.00 grant from the Chesapeake Bay Trust. The grant funding will be used to start a rain barrel program in order to teach the community about storm water runoff's direct connection to the health of local streams, ponds, lakes, and the Chesapeake Bay. The partnership formed by the Town and Chesapeake Bay Trust will allow us to subsidize 50 percent of the cost of rain barrels and also hold two educational workshops.

A complete rain barrel system is only **$40.00**! This system includes a premade terra cotta colored 55/60-gallon barrel, overflow hose, and spigot. Only one rain barrel per household until March 1, 2020.

Hurry and order your barrel before grant funds run out!

Please contact Zach Gulden, Town Planner, at 301-600-6309 or by email zgulden@emmitsburgmd.gov if you would like to attend a workshop and/or purchase a rain barrel.

THE CHESAPEAKE BAY TRUST

The Chesapeake Bay Trust is a nonprofit grant-making organization dedicated to improving the watersheds of the Chesapeake Bay. Created in 1985 by the Maryland General Assembly, their goal is to increase stewardship through grant programs, special initiatives, and partnerships that support K-12 environmental education, on-the ground watershed restoration, community engagement, and the underlying science of these three realms. Through their grants, the Trust engages hundreds of thousands of students and volunteers in projects that have a measurable impact on the natural resources of our region. Their goal is simple: they believe that getting residents involved is key to restoring the Chesapeake Bay. To learn how you can take action, visit www.cbtrust.org.

Town of Emmitsburg Rain Barrel Program

WHY IS STORM WATER RUNOFF A PROBLEM?

Impervious surfaces like roofs, parking lots, and roadways act as funnels, turning life-giving rain into damaging storm water runoff. As it flows, storm water picks up pollutants, including fertilizer, chemicals, gasoline, and silt, and dumps them into streams, rivers, and the Chesapeake Bay. Storm water is also responsible for erosion and the resulting loss of habitat for plants, aquatic life, and animals.

BENEFITS OF RAIN BARRELS

- Using a rain barrel can save you money! They are a cost-effective alternative to using tap water for watering yards and gardens.
- Treated water that flows from your hose can have salts and chemicals that are tough on plants. Rainwater has nutrients and minerals that your garden will love.
- Reduces peak volume and velocity of storm water runoff to streams and storm sewer systems.
- Helps reduce peak water demand during summer months.
- Inexpensive to install and maintain.
- Improve erosion in your yard.
- Water collected by the barrel may be used during droughts or water restrictions.
- Since the barrels are purchased from the Scott Key Center in Frederick County, the rain barrel program benefits adults with developmental disabilities.

Fun Fact

One inch of rain falling on 1,000 square feet yields approximately 623 gallons of water!

RAIN BARREL ORDER / WORKSHOP ATTENDANCE FORM

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Please circle: I **would / would not** like to be notified of the next rain barrel workshop.

If attending a workshop, # of attendees: _____

Please note: Cost: $40.00 per barrel. Cash or check only. Checks can be made out to the Town of Emmitsburg and mailed to Town of Emmitsburg, ATTN: Zach Gulden, 300A S Seton Ave, Emmitsburg, MD 21727. Only 1 barrel per household until March 1, 2020. Only Emmitsburg residents and property owners are eligible for reduced rate barrels.

BUILDING A GREENER LIFESTYLE FOR FREDERICK COUNTY

Composting: *Do the Rot Thing*

RESOURCES:

- **Frederick County Government Office of Recycling**
  9031 Reichs Ford Road
  Frederick, MD 21701
  301-694-1848, 301-696-2960
  www.co.frederick.md.us/Recycling/
- **Demonstration Center at the Frederick County Landfill**
- **United States Environmental Protection Agency**
  www.epa.gov
  1-800-490-9198
- **City of Toronto**
  has a comprehensive composting website at www.city.toronto.on.ca/compost/index.htm

WHY COMPOST?

Composting food and yard scraps is a great way to make inexpensive, high quality fertilizer for lawn and garden. It also reduces the volume of the garbage stream entering our municipal waste facilities.

In 2001, US residents, institutions, and businesses produced more than 229 million tons of garbage. That amounts to about 4.4 pounds per person per day (up from 2.7 pounds per person per day in 1960)! Of this, 12.2 percent was yard trimmings and 11.4 percent was food scraps. **That's almost 25 percent of landfill mass that could be composted.**

A simple compost bin made of cement blocks.

Adding compost to soil improves the structure, texture, and aeration. Plants grown in compost are stronger and more resistant to disease and insects and, therefore, require less insecticide. Healthy soil absorbs and filters runoff, protecting streams from erosion and pollution.

Commercially available bins are easy to set up.

COMPOSTING METHODS

If possible, locate the compost pile in a partially shaded spot. Choose a site that is convenient - has easy access from the kitchen, good drainage, and available water. When building a pile, start with a brown layer (see chart on page two). Always bury food scraps in the pile or top them with another compostable material.

- **Heap**
  The simplest method of composting is to pile the materials on top of each other directly on the ground.
- **Bin**
  The ideal size for a compost bin is 1 cubic yard (3 x 3 x 3 feet). Wood bins can be made from four used shipping pallets that are tied together with wire. A fifth pallet can be used as a floor to provide better air circulation to the pile.

A wire bin can easily be made from making a circular loop out of fencing or chicken wire. Simply pick up the bin and allow the compost to fall through the open bottom. Place the bin next to its last location and fork the top of the pile into the bottom of the new location.

There are also several types of composting bins and tumblers commercially available.

ELEMENTS OF COMPOST

Raw Material

OK	NO
• Fruit and vegetable scraps • Egg shells • Coffee grounds and filters • Tea bags • Leaves • Grass • Yard clippings • Lint • Fresh garden trimmings, flowers, and plant leaves • Barnyard manure (horse, cow, chicken) • Shredded paper, cardboard, paper towels, napkins or tissues	• Meat • Dairy products • Oil or grease • Pet waste • Fish scraps • Diseased plants • Bones • Sawdust from plywood, treated or painted wood • Clippings recently treated with herbicides or pesticides • Insect-infested plants • Cooked vegetables and fruit

Browns (Carbon)	Greens (Nitrogen)
• Leaves • Straw • Woody Materials	• Grass • Food Scraps

This attractive bin allows air to flow through the pile and easy access with a hinged door.

An equal amount of greens and browns should keep a compost pile in balance. Too many greens will produce a smelly, soggy mess, while too many browns will take a long time to decompose.

Compost piles should be as damp as a wrung-out sponge. Piles may need to be sprinkled with water occasionally during the summer. They may need to be covered with a tarp if there are extended periods of wet weather.

For quicker composting, aerate the pile every two to three weeks by turning with a pitchfork or poking holes in the pile with a broom handle.

Compost is ready to use when the raw materials are no longer visible. Finished compost is dark brown and has an earthy smell. The bottom of the pile may be ready before the top.

MICRO- AND MACRO- ORGANISMS

Macroorganisms include earthworms, sow bugs, and other insects. Microorganisms include bacteria, fungi, and enzymes. These elements will come to your pile naturally as long as the pile is not located on concrete or a paved surface. Place your bin on the ground so organisms can colonize the compost pile.

DID YOU KNOW....

More than 67 percent of the municipal solid waste produced in the United States (including paper) is compostable material.
-US EPA

Community Commons

The Building a Greener Lifestyle series is a public outreach component of the Monocacy And Catoctin Watershed Alliance (MCWA), an alliance of diverse stakeholders interested in improving water quality and wildlife habitat in the Monocacy and Catoctin Watersheds. Community Commons and Frederick County Government developed the series to empower citizens. More information about the MCWA and Frederick County Government can be found at 301.694.1413 or at www.co.frederick.md.us/cleanstreams. More information about the Greener Lifestyle series and about Community Commons can be found at 301.662.3000 or at www.communitycommons.org.

Tips for Green Leaders -in- FREDERICK COUNTY

Gardening with Native Plants

Why Choose Native Plants?

– Teresa Gallion, M.G., Wildlife Gardening Adventures

From the streamside wetlands to the mountaintop forests, thousands of plant species contribute to the diverse ecosystems of Frederick County. They provide wildlife with food, shelter, and places to raise their young, and they keep our water clean. These diverse plant communities are the foundation of all ecosystems – including those in your yard.

Native plants established their habitats without being dispersed large distances by humans. We can use this definition to easily judge what is native. Plants that were growing in the continental United States before Europeans arrived are considered native. Because native plants have been part of their habitats for so long, they are naturally adapted to the local environment and are often more disease-, flood-, and drought-resistant than non-natives. You can reintroduce and conserve our native plant species by including them in your home gardens. You will be protecting our natural resources because your garden will require fewer chemicals, less water, and less maintenance. Planted in the proper location, natives are very low-maintenance.

Spring bloom of a native redbud

A little research can save you a lot of trouble. Think about the vast diversity of the mid-Atlantic region; coastal grasses would not survive in a woodland garden of the Catoctin Mountains. Choose native plants that reflect the conditions of your specific area. A well drained, full sun location is perfect for the butterfly-attracting dense blazing star (*Liatris spicata*), while the moisture-tolerant cardinal flower (*Lobelia cardinalis*) will do well along the edge of a pond.

Most nurseries carry some native plants, and some nurseries specialize in native plants. Some plants will be more readily available than others will. If you have a favorite that you can't obtain, be sure to ask your local nursery to consider adding it to their stock.

Native plants should not be removed from the wild unless an area is about to be developed. Even then, it is difficult to transplant wild collected plants and to duplicate their sod and other growth requirements in a home garden. Plants that are grown from seed or cuttings by nurseries have a much greater tolerance for garden conditions. Help to preserve natural areas by purchasing plants that have been grown, not collected.

Non-Native Plants

Non-native, invasive, or exotic plants introduced from other parts of the world have degraded many natural ecosystems. Some of these non-native plants were brought here intentionally for their medicinal, ornamental, or food value. Others hid in soil, crop seed, or ballast water. Although many non-native plants are considered beneficial and containable, it is difficult for most gardeners to know the risks of every ornamental plant. Some introduced plants have few or no natural measures of control or competition. Invasive plants spread rapidly and out-compete native vegetation, and few species of wildlife eat them. Ecosystems impacted by invasive, non-native plants have a reduced ability to clean our air and water, stabilize the soil, and provide wildlife habitat.

Common Invasive Species of Maryland:

Vines:
Mile-a-Minute (*Polygonum perfoliatum*)
Oriental Bittersweet (*Celastrus orbiculatus*)
Japanese Honeysuckle (*Lonicera japonica*)
English Ivy (*Hedera helix*)

Shrubs:
Multiflora Rose (Rosa multiflora)

Grasses:
Japanese Stiltgrass (*Microstegium vimineum*)
Common Reed (*Phragmites australis*)

Trees:
Tree of Heaven (*Ailanthus altissima*)
Norway Maple (*Acer platanoides*)
Autumn Olive (*Elaeagnus umbellata*)

Herbaceous plants:
Japanese Knotweed (*Polygonum cuspidatum*)
Garlic Mustard (*Alliaria petiolata*)
Canada Thistle (*Cirsium arvense*)
Bull Thistle (*Cirsium vulgare*)

Tidbits

In 1994, President Clinton recognized the natural landscaping movement by issuing an Executive Memorandum that presented guidelines for the use of natural landscaping at federal facilities. The use of native plants around the Vice Presidential mansion is one example of how the government implemented this new mandate.

Use of pesticides may kill beneficial pollinators, like the monarch butterfly.

Pesticides are often wrongly applied at times when target insects are not vulnerable. Overuse and inappropriate use can kill beneficial insects and other wildlife; less than 10% of all insects are harmful to plants. Pesticides may also cause serious human health problems when handled improperly. You can decrease the use of chemicals by planting native plants, which are so well-adapted to their native ecosystems that they often do not require extra nutrients or protection from pests.

Planting drought-resistant plants in your yard reduces the amount of watering required to keep the plants healthy. The U.S. Environmental Protection Agency estimates that a household can save 20-50% of their outdoor watering needs by converting to a water-efficient landscape through the use of drought-resistant plants and careful design. Many native plants are drought resistant. Consult a native plant guide to decide which plants to use.

Americans use 300 million gallons of gas each year to mow lawns.

According to the U.S. Environmental Protection Agency, Americans mow 31 million acres of lawn every year. It takes 300 million gallons of gas and 1 billion hours to complete the chore. And for this privilege they will spend $17 billion on everything from pesticides (70 million pounds) to lawn tractors. Grass clippings consume an estimated 25 to 40% of landfill space during the course of the growing season in many U.S. suburban communities.

Resources:

Native Plants and Natural Landscaping:

Alliance for the Chesapeake Bay, Bayscapes
allianceforthebay.org/library/publications/bayscapes/

Lady Bird Johnson Wildflower Center
www.wildflower.org/explore/

Maryland Native Plant Society
www.mdflora.org

U.S. Fish and Wildlife Service
http://www.fws.gov/chesapeakebay/BayScapes/bsresources/bs-nativeguides.html

Wild Ones - *Native Plants, Native Landscapes*
www.for-wild.org

Audubon Society of Central Maryland
www.centralmdaudubon.org/index.htm

Invasive Species:

The Maryland Invasive Species Council
www.mdinvasivesp.org/index.html

The Maryland Department of Natural Resources
http://dnr2.maryland.gov/invasives/Pages/default.aspx

The University of Maryland, Home and Garden: *https://extension.umd.edu/hgic*

Planting Native Programs:

Growing Native
http://potomac.org/growing-native/

Marylanders Plant Trees Program
www.trees.maryland.gov/

National Wildlife Federation Backyard Wildlife Habitat Program
www.nwf.org/backyardwildlifehabitat/

The Tips for Green Leaders in Frederick County is a public outreach component of the Frederick County Office of Sustainability and Environmental Resources' Green Homes Challenge (GHC). For more information about the GHC please visit: **www.FrederickCountyMD.gov/GreenHomes** or call 301.600.7414.

BUILDING A
GREENER LIFESTYLE
FOR FREDERICK COUNTY

Natural Household Cleaners

FOR MORE RECIPES

Internet:
- **Boulder County Recycling webpage**
  http://www.ecocycle.org/hazwaste/recipes.cfm
- **Children's Health Environmental Coalition**
  http://www.checnet.org/healthehouse/education/
- **Los Angeles County Department of Public Works**
  http://ladpw.org/epd/hhw

Books:
- **Clean House, Clean Planet**
  by Karen Logan
- **The Green Kitchen Handbook**
  by Annie Berthold-Bon
- **Home Safe Home**
  by Debra Dadd-Redalia

SUPPLIES

- **Galam**
  www.Galam.com
  Carries 7th Generation products, available in bulk quantities, 877-989-6321
- **Green Home**
  www.greenhome.com
  Has a wide selection of cleaning products, 877-262-6400

REFERENCES

- **Household Products Database**
  http://hpd.nlm.nih.gov/products.htm
  National Institutes of Health, National Library of Medicine
  Search the database for household products to find out what is in them and their potential health effects.
- **The Consumer Union Guide to Environmental Labels**
  www.eco-labels.org
  This site is where to go if you are ever confused about terms used in advertising or on a label. What do "biodegradable" and "earth smart" mean? And who regulates these claims? This site can answer these questions.

NATURAL HOUSEHOLD CLEANERS

Common household products such as castile soap, baking soda, vinegar, and lemon can make powerful natural household cleaners.

Cleaners can be classified as more or less environmentally preferable. At the high end (preferable) would be products that are almost entirely vegetable derived, perhaps with some mineral content. At the low end (not preferable) are products that are entirely petroleum derived, do not readily biodegrade, and contain highly toxic or carcinogenic components. In the middle are products that are petroleum based and are biodegradable and less toxic, as well as cleaners that contain both plant and petroleum components.

Conventional cleaners are among the most dangerous chemicals found in the home, but these chemicals are not always listed on the labels. The Consumer Product Safety Commission regulates the labeling of products. Many cleaners contain known carcinogens (cancer-causing substances), endocrine disrupters (cause reproductive illnesses), and some emit large doses of VOCs (volatile organic compounds) that contribute to smog.

When possible, use non-toxic products to clean your home. Many of these products are just as effective as their chemical counterparts, are safer to use, and less expensive. One way to ensure you are using safe cleaners is to make your own using natural ingredients.

Basic ingredients include baking soda, castile soap, vinegar, and water. Essential oils provide pleasant smells and may make a dirty job more enjoyable.

- Baking Soda (sodium bicarbonate) works as a deodorizer and mild abrasive. It is non-toxic to humans, inexpensive, and versatile.
- Castille soap removes dirt by dissolving oils that bind dirt to surfaces. Soaps made from vegetable sources are better for the environment than those made from petroleum sources; they biodegrade more quickly and come from a renewable resource.
- White, distilled vinegar (acetic acid) is a powerful deodorizer that repels grease, can help prevent mold and mildew, and dissolves soap film and mineral deposits. Choose vinegar made from vegetable sources.
- Borax cleans and deodorizes. It is an excellent disinfectant, and softens water. Borax can usually be found with laundry products in grocery stores.

LAWN CARE TIPS

The choices we make in maintaining our lawns can make a real difference in the health of our streams, rivers, and the Chesapeake Bay. Read on to consider some easy tips to simplify lawn care and protect our water resources:

- **Keep the fertilizer spreader in the garage this summer.**
  Unless you plan to have livestock grazing on your lawn, you simply don't need to fertilize your grass every year. Many people never fertilize and still have green lawns. Have your soil tested to determine the type and amount of fertilizer or other soil amendments needed for a healthy lawn. Fertilize in the fall, not springtime, using slow release forms of nitrogen. Aerate your soil to reduce compaction and help lessen fertilizer run-off from your lawn. Fertilizers and pesticides, when improperly applied to lawns, can enter and pollute waterways.
- **Measure your yard.**
  Most lawn care product application rates are based on 1,000 square feet. Do you really know how big your yard is? Take an afternoon to recline on your patio or deck and visualize 1,000 square feet (think of a square ten paces by ten paces). The most common reason why folks over-fertilize is that they over-estimate the size of their yard when buying and using lawn care products (several regional lawn experts now recommend that great lawn results can be achieved with as little as 10 pounds of nitrogen per 1,000 square feet per year–something not reflected in current product packaging).
- **Check the weather forecast before you fertilize or spray.**
  If rain is expected within the next 24 hours, delay application until the next dry period.
- **Never apply herbicides or insecticides within 5 feet of pavement.**
  If you must remove weeds near pavement, simply pull them by hand. Also make sure to rinse out applicators away from paved areas too. A recent California study showed that lethal insecticide levels in one small urban stream were caused by a half-dozen homes that failed to follow these simple rules. Don't leave fertilizer on sidewalks or driveways where it can be washed into the nearest stream.
- **Be a careful consumer.**
  Read all product labels carefully. If the product has too many warnings on the label, consider replacing it with a safer alternative. Consider these less toxic insecticides: insecticidal soaps, pyrethrum, rotenone and neem, horticultural oils, B.t. (Bacillus thuringiensis). The following natural fertilizers contain relatively low concentrations of nutrients, but add valuable organic matter to soil: cottonseed meal, blood meal, bone meal, fish emulsion, and manure.
- **Don't overwater the lawn.**
  Established lawns will survive a few weeks without rain. Watering by hand or light, frequent water applications will make roots reach the soil surface for moisture, causing thatch and promoting weed growth. An abundance of water results in excessive leaf growth, depleting a lawn's natural energy reserves and weakening its disease resistance. Artificially high moisture and surface humidity can spread and foster disease pathogens. Cool weather grasses, like ryegrass or Kentucky bluegrass and some fescues go dormant and brown in the hot summer months and should not be watered. Grass is not always the best choice for steep slopes, shady areas, or walkways—consider native groundcover landscaping.
- **Mow Higher and Less Frequently.**
  You can control weeds by shading them out. Set your mower height to three inches and you will have both a healthier lawn and fewer weeds. Experts caution that cutting grass too short is the second leading cause of problem lawns.
- **Don't Bother with Herbicides; you really can't win.**
  An average acre of soil contains more than 200 million 'weed' seeds in the top six inches of soil, which germinate under the right moisture, light, and temperature conditions. Indeed, when you turn over grass and expose the underlying soil, about five percent of these seeds can germinate, or about 250 weeds per square foot. Don't get involved in a battle you can't win, and remember that the naked eye generally cannot distinguish between a perfect lawn and one containing at least a few weeds.
- **Honey, I shrunk the lawn!**
  A great way to save time and energy is to reduce the turf area on your property by about 5 percent each year. Start with the soggy and/or steep areas that are difficult to mow. Dig out the lawn and replace it with flower and shrub beds. There are many attractive ways to do this. Place 3–4 inches of mulch and plant some container-grown plants.
- **Select a Good Natural Lawn Company.**
  About 25% of us use the services of a lawn care company to take care of our yards. While it is nice to have somebody else to do the sweating, a good slacker should insist on a company that uses organic fertilizers and natural pest management techniques. Although just about every lawn care company has the word 'green' in its name, this doesn't necessarily mean that it practices environmentally-responsible lawn care. Before you sign a contract, check them out to see if they use natural or organic methods and conduct a soil test. Make sure the firm and its personnel are licensed and certified by the Maryland Department of Agriculture's Pesticide Regulation Section.

The Building a Greener Lifestyle series is a public outreach component of the Monocacy And Catoctin Watershed Alliance (MCWA), an alliance of diverse stakeholders interested in improving water quality and wildlife habitat in the Monocacy and Catoctin Watersheds. Community Commons and Frederick County Government developed the series to empower citizens. More information about the MCWA and Frederick County Government can be found at 301.694.1413 or at www.co.frederick.md.us/cleanstreams. More information about the Greener Lifestyle series and about Community Commons can be found at 301.662.3000 or at www.communitycommons.org.

BUILDING A
GREENER LIFESTYLE
FOR FREDERICK COUNTY

Maintaining your Lawn while Protecting Water Quality

LAWN FACTS

Lawnmowers and air pollution.
One hour of pushing a new, gas-powered lawn mower around your yard produces about the same amount of pollutant emissions as driving your car for 50–70 miles. By some estimates, up to five percent of summer hydrocarbon emissions in suburban areas are due to lawnmower emissions.

Lawns are not Sponges.
Most lawn soils are extremely compacted, and recent research indicates that about half of all rainstorms produce at least some runoff from lawns. So, be careful what you put into your lawn–there's a good chance it may end up in the nearest stream, creek and the Chesapeake Bay!

Polluting Streams
The most comprehensive national pesticide monitoring study to date, conducted by the US Geological Survey, detected higher levels of insecticides in urban streams than in those in agricultural areas.

A Labor of Love
In Maryland alone, homeowners spend an estimated 72 million hours collectively each year on lawn care.

Turf Nation
According to industry estimates, there are more than 50 million acres of managed turf in the US. By comparison, the total watershed area of the Chesapeake Bay is just over 40 million acres.

Lawns that are as hard as a rock.
Several studies have shown that about a third of all lawns are so highly compacted during the construction process that they have the same hydrologic properties as concrete.

The DDT Legacy
Despite being banned more than 20 years ago, researchers routinely find low levels of the chemicals DDT and DDE in urban stormwater and sediment samples in our region. The legacies of these persistent pesticides are a sobering reminder that small actions can have long-term consequences.

IS GREEN GRASS REALLY GREEN?

Most of us have childhood memories of running barefoot through the grass. In mid-Maryland, the growing season for turf grass is close to 200 days–lots of time for running through the grass! According to a study by the Center for Watershed Protection in Ellicott City, Maryland, nearly 90% of residents in the Chesapeake Bay Watershed have a lawn, and the amount of turf that is fertilized in the Bay Watershed is equivalent to 800,000 football fields. In Maryland, the area devoted to managed turf or lawns consume more land area than corn, soybeans, and wheat combined!

Is this your lawn? Is there an alternative? What's wrong with this picture?

Estimated Distribution of Turf Grass by Sector in the Chesapeake Bay Watershed
(courtesy Center for Watershed protection)

Sector	%
Home Lawns	70%
Roadside Right-of-Way	10%
Municipal Open Space	7%
Parks	4%
Schools	3%
Golf Courses	3%
Churches	2%
Cemeteries	1%
Others (e.g., airports, sod farms)	1%

Is your lawn a healthy, diverse green ecosystem, pleasant to the eye with low cost, ecologically sound maintenance or an economic and environmental liability from overfertilizing and overwatering?

RESOURCES

- **Backyard Actions for a Cleaner Chesapeake Bay:** www.mda.state.md.us, www.hgic.umd.edu
- **Healthy Habits for Clean Water:** http://www.epa.gov/npdes/stormwater
- **Environmental Lawn Care - Grasscycling:** www.grasscycling.askdep.com
- **Envirocast: Weather and Watershed Newsletter.** The Grass Crop of the Chesapeake Bay Watershed www.stormcenter.com/envirocast/2003-05-01/envirocast.php
- **Reducing Turf** Grow It! Don't Mow It. Wild Ones Website. www.for-wild.org

TO CLEAN OR DEODORIZE...	TRY...
Windows and windshields	Club soda
Tubs, sinks, and toilet	Paste of baking soda, castille soap, and water
Open and clean sink and tub drains	Mix 1/4 cup vinegar and baking soda. Let stand a few minutes and rinse with boiling water.
Silverware, candlesticks, etc.	Paste of baking soda and water, or toothpaste
Mildew	Mix 1/2 cup vinegar with 1/2 cup borax in warm water. Apply with a sponge or spray bottle.
Garbage disposal	Grind ice or citrus peels in disposal.
Ceramic tiles	Mix 1/4 cup vinegar with 1/2 gallon hot water.
Carpet Odor	Sprinkle carpet with baking soda, cornmeal, or cornstarch. Allow to sit 1/2 hour and vacuum up.

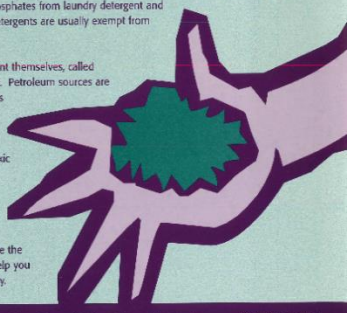
ENVIRONMENTAL IMPACTS OF CONVENTIONAL CLEANERS

Phosphates are minerals that act as water softeners. They can be very effective cleaners, but also act as fertilizers. When cleaning products are washed down the drain, phosphates enter waterways and cause rapid growth of algae, polluting the water. Many states have banned phosphates from laundry detergent and other cleaning products. Automatic dishwasher detergents are usually exempt from these restrictions.

The key ingredient in many cleaners is the detergent themselves, called surfactants. Most surfactants are petroleum based. Petroleum sources are a limited resource and their extraction often causes pollution.

Responsible use of bleach means minimal use. If needed for disinfection, clean first with a non-toxic product and follow-up disinfection with bleach.

It is important to determine the life cycle of a product before purchase. Ask questions about the manufacturing process, packaging, shipping, performance, and resource recovery (can you reuse the package?). The answers to these questions will help you determine if the product is environmentally friendly.



Community Commons

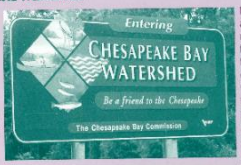
The Building a Greener Lifestyle series is a public outreach component of the Monocacy And Catoctin Watershed Alliance (MCWA), an alliance of diverse stakeholders interested in improving water quality and wildlife habitat in the Monocacy and Catoctin Watersheds. Community Commons and Frederick County Government developed the series to empower citizens. More information about the MCWA and Frederick County Government can be found at 301.694.1413 or at www.co.frederick.md.us/cleanstreams. More information about the Greener Lifestyle series and about Community Commons can be found at 301.662.3000 or at www.communitycommons.org.

BUILDING A
GREENER LIFESTYLE
FOR FREDERICK COUNTY

Harvesting Rainwater using Rain Barrels

WATER: A LIMITED NATURAL RESOURCE

In 2002, Maryland was in a severe drought. Groundwater levels dropped, streams dried up, and the Monocacy River experienced record low flows. Area residents were faced with water restrictions and bans on outdoor use. The City of Frederick even had an emergency plan to buy water and haul it to residents if the drought continued and the City's water supplies became further reduced. Water conservation became a top issue in the media and a frequent discussion topic as more people realized the full magnitude of our finite water supply.



A concept that gained notoriety during this difficult time was using a rain barrel to harvest and reuse rainwater for landscape purposes. A 4,000-year-old practice widely used in less-developed countries, collecting rain in a barrel is an easy and sound way to extend water resources. Besides, where landscaping is concerned, plants prefer natural rain water to either treated or well water.

Since 2002, the weather pendulum has swung to the other extreme. Rainfall has been abundant, and the worry has shifted from drought to flooding.

Hard, impervious surfaces like roofs, parking lots, and roadways act as funnels, turning life-giving rain into damaging stormwater runoff. As it flows, stormwater picks up pollutants, including fertilizer, chemicals, grease, gasoline, and silt, and dumps them into streams, rivers, and the Chesapeake Bay. Stormwater is also responsible for erosion and the resulting loss of habitat for plants, aquatic life, and animals.

While a rain barrel is a great tool to use during a drought, it can also help during times of abundant rainfall. Businesses and homeowners who use rain barrels to catch the water from their roofs can stem the tide of stormwater before it begins! Captured rainwater can be stored and used to supply plants between rainfall events, or channeled into rain gardens where it can seep into the ground instead of running off. We all live in a watershed and should manage our property as though the Chesapeake Bay was at the end of our driveway. In a way, it is!

Too much rain? Not enough? Rain barrels are a good solution in either case!

WATERWISE LANDSCAPE MANAGEMENT

Plants, flowers, and trees add beauty to our yards, nourish our being, and reinforce our connection to the natural world. With a little care and planning, we can manage water resources in the garden to benefit both our plants and the environment.

Seven steps to a water-wise landscape:

- Improve soil quality and structure (enrich with organic matter).
- Select native and/or drought tolerant plants.
- Group plants with similar water needs.
- Use mulch to help the soil retain moisture.
- Practice good watering habits (water deeply and early in the day).
- Collect and reuse "gray water" from the bathtub, laundry or kitchen.
- Capture and store rainwater to use during dry weather.

RAIN BARREL PRIMER: SELECTION

Not all rain barrels are created equal, and it pays to know what features to consider when either making your own rain barrel or purchasing one that is ready-made.

A rain barrel should be made of a dark, UV-stable material that will not allow sunlight to reach the collected water. Sunlight plus water equals algae! While not harmful to plants, algae is unsightly and will clog the spigot. UV-stable material will extend the life of a rain barrel exposed to long periods of direct sunlight.

Select a barrel that is made of non-toxic material. ***Never purchase or construct a rain barrel unless you are absolutely certain of the history of the container used.***

Never use a plastic trash can as a rain barrel. Even good quality trash cans can warp and split from the weight of collected water. Trash cans are also difficult to make child-safe and mosquito-proof.

A well-designed rain barrel will feature a large overflow to help manage excess water once the barrel is full and during periods of heavy rainfall. An overflow the size of a garden hose is too small to handle heavy rainfall rates typical of the eastern U.S.

Look for a rain barrel that can be easily linked to additional barrels to double or even triple storage capacity.

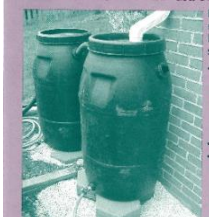
The barrel should have a rigid lid that is fully screened and securely fastened. The lid should be designed to minimize the drowning risk for humans or animals. It should use screen to keep debris and mosquitoes out of the captured water.

The barrel's spigot should be made of high-quality metal– NEVER plastic– and should be located at the bottom of the barrel so that all of the captured water can be accessed.

Rain barrels should not be constructed using adhesives or sealants because they will eventually fail and leak. These problems are often difficult or impossible to repair and result in a barrel destined for the landfill.

IMPORTANT NOTE! Before setting up a rain barrel, BE SURE you will be in compliance with all applicable laws, rules and ordinances pertaining to collecting and storing rainwater. If your town or subdivision does not allow rain barrels, work closely with elected officials or the homeowner's association to address concerns and, hopefully, shape a new conservation policy! It is easy to screen rain barrels from view using plant material, lattice or fencing. When drafting guidelines for use, be sure to prohibit collection of rain water in an unsafe container that poses a drowning and mosquito hazard.

RAIN BARREL PRIMER: SAFETY



Even the best conservation practice is not worth implementing if it cannot be done safely. Keep these simple safety tips in mind:

- Situate the barrel on a firm, level foundation. A 60-gallon rain barrel weighs at least 500 pounds when full, and poses a tipping hazard when placed on a soft, unlevel surface.
- Secure the barrel to prevent tipping.
- Never use an open container to collect and store rainwater. Open containers pose a drowning hazard for humans and animals.
- Always screen a rain barrel to discourage mosquitoes from breeding and spreading West Nile Virus.

USAGE TIP... Elevate the barrel slightly to increase water pressure and improve access to the spigot

- Heavy rains may cause the barrel intake to exceed overflow capacity. Monitor the water level in the barrel and return the downspout to normal function when barrel is full.
- Collected rainwater is not intended for human or animal consumption.
- Make sure overflow points away from the foundation of the building to minimize any risk of property damage.

RAIN BARREL PRIMER: YIELD FORMULA

It is amazing how little rainfall it takes to fill a 60-gallon rain barrel.

Rainfall yield formula:

One inch of rain falling on 1000 square feet yields approximately

623 gallons of water!

Rain falling on a 750-square-foot section of roof will fill a 60-gallon barrel with only

1/8-inch of rain.

It does not take a large roof or a lot of rainfall to add up to big savings.

Save treated or well water for drinking or bathing. With no dissolved minerals or chemicals, rainwater is the best water source for plants... and it is free!

RESOURCES:

For more information, contact

- ICPRB Communications Staff
  Interstate Commission on the Potomac River Basin
  51 Monroe St, Suite PE-08
  Rockville, MD 20850
  301-984-1908
  www.potomacriver.org

ATCH
E RAIN

Community Commons

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Tips for Green Leaders -in- FREDERICK COUNTY

Design and Constuction of a Rain Garden

Rain, Rain - Soak In!

Like our roofs and driveways, turf often prevents rainwater from soaking into the ground.

Where does the rainwater go that runs off of your roof, driveway, lawn, and sidewalk? This "stormwater runoff" is often conveyed to curbs, gutters, drains, or sewers, then piped to a stormwater detention pond and gradually released into the nearest stream or lake. However, stormwater was not regulated until the mid 1980's, which means that roads and buildings constructed before stormwater regulations might not have any treatment before water reaches a stream.

A novel alternative to the conventional 'pipe and pond' approach is the use of a rain garden to store and treat runoff and recharge groundwater. Rain gardens are suitable for any land use—residential, commercial, or industrial. In a rain garden, rainwater from paved surfaces, downspouts, and lawns is collected in shallow, low-lying areas planted with native vegetation to be stored temporarily, absorbed by plants, and percolated into the ground. Pollutants such as fertilizer, pesticide residue, oil, and heavy metals can be trapped by the rich soil and root systems in the rain garden, permitting cleaner water to slowly soak down through the soil and rocky subsoil until it recharges groundwater supplies.

Native plant species that can tolerate the extremes of wet soils and dry periods are preferred for use in a rain garden. They are deep-rooted, adapted to the local climate, and attractive to pollinators, nectar-feeders, and other wildlife. Many of these native plants are sold by local nurseries, where experienced horticultural staff can help match suitable plants with your rain garden needs. You will need to consider sun exposure, soil type, soil moisture retention, and drought resistance when selecting plants.

Rain Garden Benefits

A rain garden can be your personal contribution to cleaner water, healthier wildlife, and an improved environment for you and your community. Each rain garden may seem small, but collectively they produce substantial environmental benefits.

Rain gardens benefit us by:

- Increasing the amount of water filtering into the ground. This recharges groundwater and helps reduce the amount of pollutants washing off into lakes and streams;
- Helping to sustain adequate flows in streams during dry spells;
- Providing valuable wildlife habitat;
- Enhancing the beauty of your yard and the neighborhood;
- Protecting communities from flooding and drainage problems;
- Protecting streams and lakes from damaging flows that cause bank erosion;
- Reducing the need for costly stormwater treatment structures.

Resources:

Rain Garden Design:

- Chesapeake Ecology Center *tinyurl.com/39u6gml*
- RainScaping.org *www.rainscaping.org/*
- Low Impact Development Center *www.lowimpactdevelopment.org/raingarden_design/index.htm*
- Wisconsin Department of Natural Resources *tinyurl.com/y8m6r2n*
- Iowa Stormwater Partnership *tinyurl.com/7f4o79c*

Native Plant Guides:

- U.S. Fish & Wildlife Services *www.nativeplantcenter.net/guides/chesapeakenatives.pdf*
  - Mountain Region Guide: *tinyurl.com/c7pf2h2*
  - Piedmont Region Guide: *tinyurl.com/cml7zdj*
- BayScapes Program *tinyurl.com/ctw7g2e*

Constructing a Rain Garden

Key steps in the process include choosing a location, sizing, designing the garden, checking for utility lines, installing the garden, and maintenance. You might decide to do all or some of the steps yourself, or you might select a professional landscaper to help.

This rain garden has an attractive curved shape and brightly colored flowering plants.

Image used under Creative Commons from Jim_Holmes_DH.

1. **Choose a location.** There are several ways to choose a rain garden location. Low-lying areas that collect water or areas that stormwater usually travels across can become rain gardens. Other options include constructing a garden that collects runoff from a parking lot or redirecting flow from gutter downspouts to a garden. Keep the rain garden about 10-15 feet from buildings.

2. **Determine soil type, size, and depth.** Determine whether your soil is clay, silt, or sand based on its texture. For clay soils in particular, you will probably want to use an amended soil in your garden consisting of 50-60% sand, 20-30% topsoil, and 20-30% compost. If you use amended soil, your garden should be 20-30% of the size of the drainage area. To determine drainage area, multiply the length by the width of your roof, driveway, or other surface draining into your rain garden. Rain gardens can range from 3-12" in depth, depending on the size of the garden. A deeper depth can allow for a smaller area garden. The most important factor to consider is making your garden deep enough to hold rainwater while it soaks into the ground. If your garden is on a slope, make sure to create a berm, or raised section of ground, on the downhill side of the garden. For a more detailed guide to determining soil type, garden area, and garden depth, see p. 11 of Rain Gardens Across Maryland: *https://extension.umd.edu/learn/rain-gardens-across-maryland.*

3. **Creating a site design.** Your rain garden can be any shape that you want. Use native plant guides to select plants appropriate for your garden, based on its exposure to the sun, moisture level, and soil type. Rain gardens installed in Frederick County will need to be adapted to either the Piedmont or Mountain region of the Chesapeake Bay Watershed. For a guide to plant selection by region, see the U.S. Fish & Wildlife Service's guide: *www.nativeplantcenter.net/guides/chesapeakenatives.pdf.*

Your rain garden can be as beautiful as you decide to make it. This garden directs downspout water to a simulated stream bed.

Image used under Creative Commons from Field_Outdoor_Spaces.

4. **Check for utility lines and pipes.** Call Miss Utility at 1-800-257-7777 at least one week prior to digging.

5. **Install the garden.** Use a hose or rope to create an outline of your rain garden. Excavate by hand or machine to your pre-determined depth and build a berm using excavated soil if necessary. Fill the area with soil amendment, leaving a few inches for mulch. Remove plants from containers, loosen their roots, and plant them in the amended soil. Follow with a layer of mulch and watering.

6. **Maintenance.** Maintenance for rain gardens is essentially the same as that for other landscaping. Water your garden about one inch per week during dry spells. Replace soil or mulch if it gets washed out by heavy rains. Trim plants, remove dead vegetation, and remove weeds if needed.

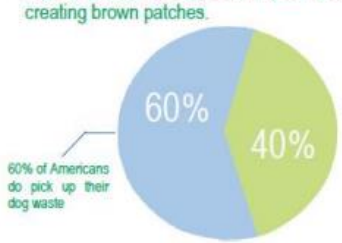
The Tips for Green Leaders in Frederick County is a public outreach component of the Frederick County Office of Sustainability and Environmental Resources' Green Homes Challenge (GHC). For more information about the GHC please visit: *www.FrederickCountyMD.gov/GreenHomes* or call 301.600.7414.

Why Scoop that Poop?

Dog waste is the **#3** cause of water pollution. In 1991, the EPA deemed dog waste to be as toxic as **oil spills**

A common myth is that dog waste is as effective of a fertilizer as cow or horse manure, when it is **actually more toxic.**

Due to their high-protein diet, dog waste is **highly acidic** and can burn your grass creating brown patches.



60% of Americans do pick up their dog waste

40% of Americans do not pick up after their dogs.

110 thousand pounds of waste are left on Frederick streets, yards, and sidewalks every year.

Sustainability@FrederickCountyMD.gov

500 million tons of waste per year

Created by **4 million dogs** in the Chesapeake Bay is enough to fill **15,000 tractor trailers.** A bumper to bumper caravan extending from Norfolk, VA to Harrisburg, PA!

Two or three days' worth of droppings from **100 dogs** contributes enough bacteria to close a bay and its watershed areas within 20 miles to swimming and shell fishing.

23 million fecal bacteria

Some of these can cause serious kidney disorders, intestinal illness, cramps and diarrhea in humans.

Frederick County Government
Office of the County Executive
Sustainability and Environmental Resources
30 N. Market St., Frederick, MD 21701

EMMITSBURG GRANT

In April 2019, the Town of Emmitsburg was awarded a $3,000.00 grant from the Chesapeake Bay Trust. The grant funding will be used to purchase supplies in order to start a storm drain-marking program. The purpose of the program is to raise public awareness that storm drains directly or indirectly connect to local water bodies that ultimately lead to the Chesapeake Bay. Our hope is that the storm drain-marking program will discourage the dumping of materials down storm drains, which will prevent pollution and improve water quality.

We thank the Chesapeake Bay Trust for their generous contribution to our Town!

THE CHESAPEAKE BAY TRUST

The Chesapeake Bay Trust is a nonprofit grant-making organization dedicated to improving the watersheds of the Chesapeake Bay. Created in 1985 by the Maryland General Assembly, their goal is to increase stewardship through grant programs, special initiatives, and partnerships that support K-12 environmental education, on-the ground watershed restoration, community engagement, and the underlying science of these three realms. Through their grants, the Trust engages hundreds of thousands of students and volunteers in projects that have a measurable impact on the natural resources of our region. Their goal is simple: they believe that getting residents involved is key to restoring the Chesapeake Bay. To learn how you can take action, visit www.cbtrust.org.

300A S. Seton Ave.
Emmitsburg, MD 21727
Phone: 301-600-6300
Email: Info@emmitsburg.gov

Only Rain in the Drain!

Town of Emmitsburg Storm Drain Marking Program

ONLY RAIN IN THE DRAIN!

You may see volunteers in your neighborhood putting special markers on storm drains as a reminder to residents that the only thing that should go into storm drains is rainwater. Please do not pour or dispose of anything into storm drains. Remember, all storm drains in Frederick County eventually lead to the Chesapeake Bay. Please contact the Town Planner at 301-600-6309 if you wish to volunteer.

What is storm water?

Storm water runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent storm water from naturally soaking into the ground.

WHY IS STORM WATER RUNOFF A PROBLEM?

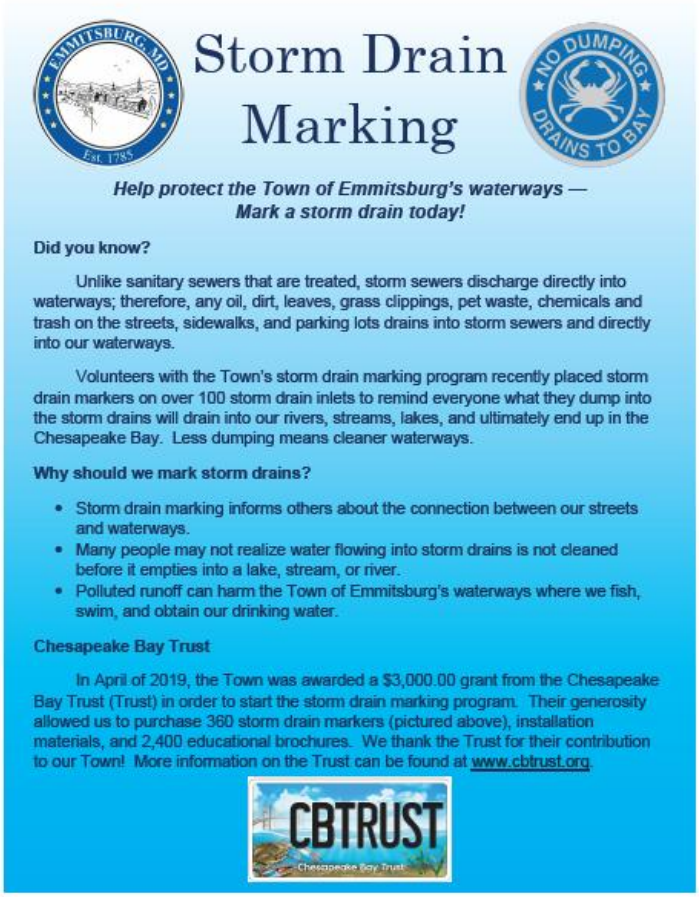
As storm water flows along streets, it picks up trash, leaves, pet waste, car fuels and other pollutants like excess lawn fertilizers and pesticides. This adds up to a lot of pollution to the Chesapeake Bay. Did you know that **110,000 pounds** of dog waste are left on Frederick County streets, yards, and sidewalks every year?

DO YOUR PART TO KEEP OUR STREAMS CLEAN FOR FUTURE GENERATIONS!

You can make a difference!

- Use lawn chemicals and pesticides sparingly.
- Recycle used motor oil and paint or dispose of it at a hazardous waste site.
- Pick up pet waste, and dispose of it in the trash.
- Compost or recycle yard waste when possible.
- Repair auto leaks.
- Wash your car on the lawn with phosphate-free soap or at a commercial car wash.
- Direct downspouts away from hard surfaces.
- Never dump anything down a storm drain that you would not swim in or drink; only rain in the drain!

Flyer Printed on 100% Recycled Paper



Storm Drain Marking

Help protect the Town of Emmitsburg's waterways — Mark a storm drain today!

Did you know?

Unlike sanitary sewers that are treated, storm sewers discharge directly into waterways; therefore, any oil, dirt, leaves, grass clippings, pet waste, chemicals and trash on the streets, sidewalks, and parking lots drains into storm sewers and directly into our waterways.

Volunteers with the Town's storm drain marking program recently placed storm drain markers on over 100 storm drain inlets to remind everyone what they dump into the storm drains will drain into our rivers, streams, lakes, and ultimately end up in the Chesapeake Bay. Less dumping means cleaner waterways.

Why should we mark storm drains?

- Storm drain marking informs others about the connection between our streets and waterways.
- Many people may not realize water flowing into storm drains is not cleaned before it empties into a lake, stream, or river.
- Polluted runoff can harm the Town of Emmitsburg's waterways where we fish, swim, and obtain our drinking water.

Chesapeake Bay Trust

In April of 2019, the Town was awarded a $3,000.00 grant from the Chesapeake Bay Trust (Trust) in order to start the storm drain marking program. Their generosity allowed us to purchase 360 storm drain markers (pictured above), installation materials, and 2,400 educational brochures. We thank the Trust for their contribution to our Town! More information on the Trust can be found at www.cbtrust.org.

BMP 1.4 – Annual Employee Training

- ***Requirement:*** Develop and implement an annual employee-training program that addresses appropriate topics to prevent or reduce the discharge of stormwater pollution into the MS4.

- ***Action Plan:*** The Town held a mandatory training session for all employees on September 15, 2020. Employees who were unable to attend the training were required to watch the recorded presentation. Mark Harman & Nate Merkel, Arro Consulting, were our guest speakers. They discussed illicit discharge detection & elimination, pollution prevention, and good housekeeping best practices. The PowerPoint presentation is attached as Attachment #7. The total cost of this training was $128.75.

Presenters: Mark Harman + Nate ARRO Consulting

Sign-In Sheet

Town of Emmitsburg Annual Employee Stormwater Training

September 15, 2020

Name – Print	Signature	Department
Zach Gulden	Zach Gulden	Planning
Amy Naill	Amy Naill	Parking / Code Enforcement
Ryan Keeney		Water / Waste Water
Jared Brannan		Water
Darrell Lambright	Darrell Lambright	Parks
David Wantz	David Wantz	Streets / Parks
Steve Fissel	Steve Fissel	Building maint.
Chris Wantz	Christopher A. Wantz	Streets / Parks
Dan Fissel	Dan Fissel	water / wastewater
Jim Glick		DPW
Cole Tabler		Acct
Reese Fryer		Acct
Cathy Willets		Town Manager

BMP 1.5 – Reporting to the Maryland Department of the Environment (MDE)

- ***Requirement:*** Describe in reports to MDE how the education programs complement and strengthen other programs of the MS4 permit.

- ***Action Plan:*** Distributing general MS4 educational materials will help educate our target population about stormwater runoff, personal behaviors to reduce runoff pollution, volunteer opportunities, illicit discharge detection, and understanding of the legal implications of the improper disposal of waste.

Minimum Control Measure #1 – Total Public Education and Outreach Costs

Description	Cost
September 15th Training	$128.75
31 Provincial Parkway Inlet	$4,324.00
MCM #1 TOTAL COST	**$4,452.75**

Town of Emmitsburg

Minimum Control Measure #2

Public Involvement and Participation Program

Minimum Control Measure (MCM) #2
Public Involvement and Participation

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Public Involvement and Participation Program is to create and foster opportunities for public participation in the MS4 management program for controlling stormwater discharges.

BMP 2.1 – Target Audience

- ***Requirement:*** Determine the target audience within the jurisdiction to promote public involvement and participation activities.

- ***Action Plan:*** The Town has identified residents, homeowner associations, elected officials, and municipal employees as the target audience groups. Public involvement is promoted through the Town Office, Town website, YouTube, cable channel 99 (local government channel), Facebook, and through the Town's newsletter that is attached to quarterly water and sewer bills.

BMP 2.2 – Appropriate Activities

- ***Requirement:*** Specify activities appropriate for the target audience and promote participation.

- ***Action Plan:*** In the 2020 reporting period, the Town was limited to our public participation events due to the COVID-19 pandemic. We did hold a rain barrel educational workshop on March 3, 2020. This is an appropriate public involvement and participation program, because individual households and businesses can set up a rain barrel and assist the Town in their pollution reduction efforts.

BMP 2.3 – Public Participation Events

- ***Requirement:*** Perform at least five public participation events during the permit term (at least 1 per year) and report to MDE in accordance with reporting requirements.

- ***Action Plan:*** In the 2020 reporting period, the Town held the following events that provided opportunities for public participation in the MS4 management program for controlling stormwater discharges: rain barrel workshop & Silo Hill SWM basin retrofit project.

Rain Barrel Program: In September of 2019, the Town was awarded a $5,000.00 grant from the Chesapeake Bay Trust in order to create and implement a rain barrel program. The purpose of the program is to raise public awareness that storm water pollution effects the health of the Chesapeake Bay. Our hope is that the rain barrel program will encourage water conservation, which will help prevent pollution and improve water quality. To date we have sold 67 rain

barrels. The Town also sponsored a rain barrel educational workshop on March 3, 2020. The workshop had eight participants; however, we recorded the workshop, and then added the video to our YouTube channel for those who were unable to attend. The video can be found here: https://www.youtube.com/watch?v=3Eb1JQMoew8

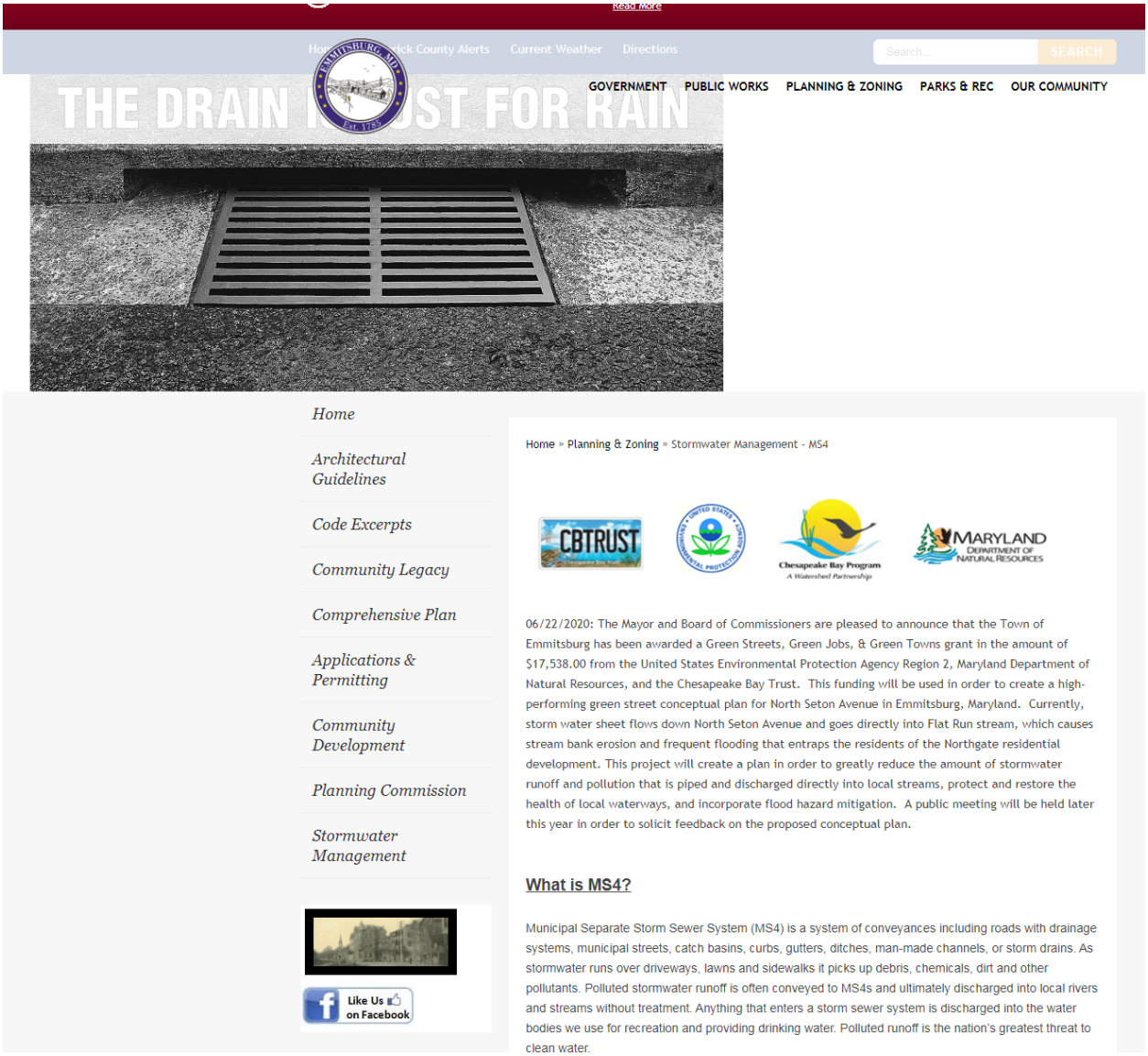
Silo Hill Stormwater Basin Retrofit Project: The Town held a virtual public outreach meeting regarding the Silo Hill stormwater management basin retrofit restoration project on August 6, 2020. The Town mailed meeting notification letters to all Silo Hill residents. The Silo Hill Homeowner's Association was also notified. Town residents were notified of the meeting via the Town's website and Facebook. Town staff and the project's contractor gave a presentation on the project. Residents were offered the opportunity to provide feedback on the plan. The project was fully supported by all of those in attendance. The video can be found here: https://www.youtube.com/watch?v=DvZqNmLj36Y

BMP 2.4 – Public Access

- ***Requirement:*** Provide public access to the permittee's progress reports via website or other method and consider any substantive public comments received concerning the jurisdiction's MS4 program.

- ***Action Plan:*** The Town has added a stormwater management page to our website, which can be located at

http://www.emmitsburgmd.gov/planning_and_zoning/stormwater_mgmt_ms4.php. The page includes links to the Stormwater Annual Progress Reports and other educational and environmental information. No public comments have been received to date. Below are pictures of the website.



Illicit Discharges

An illicit discharge is defined as any unauthorized discharge other than clean stormwater released into the Municipal Separate Storm Sewer System (MS4). Illicit connections may be intentional or may be the result of connections made years ago when water quality issues were not a concern.

The types of illicit discharges vary widely with some examples being:

- Waste oil, antifreeze, paint, trash or other household chemicals
- Car wash, laundry, and industrial wastewaters
- Spills on roadways and other accidents
- Failing septic systems and illegal dumping practices
- Improper disposal of sewage from recreational practices such as boating or camping

Common indicators of illicit discharges include abnormal odors, strange colors, or oil sheen present around or inside storm inlets or pipes. Keeping harmful substances out of our water benefits everyone; environmentally and economically.

If you witness or become aware of an illicit discharge or illegal dumping, please contact:

Zachary R. Gulden, MPA
Town Planner
Town of Emmitsburg
300A South Seton Avenue
Emmitsburg, MD 21727
Phone: 301-600-6309
Fax: 301-600-6313

Listed below are the six minimum control measures that the Town must incorporate into the stormwater management program. These measures are expected to result in significant reductions of pollutants discharged into receiving waterbodies.

1. Public Education and Outreach – An informed and knowledgeable community is crucial to the success of a stormwater management program, since it helps to ensure greater support and program compliance as the public becomes aware of individual actions they can take to protect or improve the quality of area waters.
2. Public Participation/Involvement – An active and involved community allows for broader public support, a broader base of expertise and a connection to other local environmental programs.
3. Illicit Discharge Detection and Elimination – Illicit discharges are untreated discharges that could contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses and bacteria to receiving waterbodies. The Town is required to develop, implement and enforce an illicit discharge detection and elimination program.
4. Construction Site Runoff Control – Stormwater runoff from construction activities can have a significant impact on water quality. As stormwater flows over a construction site, it can pick up pollutants like sediment, debris, and chemicals and transport these to a nearby storm sewer system or directly to a river, lake or stream.
5. Post-Construction Runoff Control – Increased impervious surfaces, like parking lots, driveways, and rooftops, interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process can include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property. Ordinances and other regulations are required to determine the appropriate best management practices and to ensure adequate long-term operation and maintenance of storm water controls.
6. Pollution Prevention/Good Housekeeping – This measure involves recognizing the benefits of pollution prevention practices and includes the development and implementation of an operation and maintenance program. Reducing pollutant runoff from municipal operations into the storm sewer system can include employee training on how to incorporate pollution prevention/good housekeeping techniques into municipal operations.

Federal & State Penalties for MS4 Permit Noncompliance

- "Duty to comply" – pg. 16 of permit.
    - "The permittee must comply with all conditions of this general permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action."
  - "Penalties Under the Clean Water Act – Civil & Criminal" – pg. 17.
    - Criminal Penalties
        - "Negligent violations… shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or by both."
        - "Knowing violations… shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $100,000 per day of violation, or by imprisonment of not more than 6 years, or by both."
        - "Knowing endangerment…subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than $1,000,000. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment."
    - Civil Penalties
        - "shall be subject to a civil penalty not to exceed $25,000 per day for each violation."

- "Penalties under the State's Environment Article – Civil & Criminal" – pg. 17
  - Civil Penalties
    - "Section 9-342 – … A person who violates any condition of this permit is liable to a civil penalty of up to $10,000 per violation, to be collected in a civil action brought by MDE, with each day a violation continues being a separate violation. This section further authorizes MDE to impose upon any person who violates a permit condition administration civil penalties of up to $10,000 per violation, up to $100,000."
  - Criminal Penalties
    - "Section 9-343 - … Any person who violates a permit condition is subject to a criminal penalty not exceeding $25,000 or imprisonment not exceeding one year, or both for a first offense. For a second offense, it provides for a fine not exceeding $50,000 and up to two years imprisonment."

Links/Additional Information

MS4 General Discharge Permit No. 13-IM-5500 – 10/31/2018 – 10/30/2023

Annual Reports

- 01/2016 – 12/2017
- 01/2018 – 10/30/2018
- 10/31/2018 - 10/30/2019
  - SOP Manual
  - Outfall Report & Pics (2019)
  - Pollution Prevention Plan
  - Baseline Impervious Assessment
  - Impervious Area Restoration Work Plan
  - Emmitsburg BMPs
- 10/31/2019 - 10/30/2020
  - Outfall Report & Photos (2020)
  - Baseline Impervious Assessment

Erosion and Sediment Control Ordinance

- Town Code – Chapter 15, Section 20.010
- Frederick County Code - Chapter 24

Stormwater Management Ordinance

- Town Code – Chapter 15, Section 21.010
- Frederick County Code - Chapter 28

Educational Materials

- Emmitsburg Rain Barrel Program
- Composting – Do the Rot Thing
- Gardening with Native Plants
- Natural Household Cleaners
- Maintaining Your Lawn While Protecting Water Quality
- Harvesting Rainwater Using Rain Barrels
- Design and Construction of a Rain Garden
- Pet Waste Fact Sheet
- Only Rain in the Drain!

Minimum Control Measure #2 - Public Involvement and Participation Costs

Description	Cost
Storm Drain Marking Program (flyers)	$260.25
Rain Barrel Program (40 barrels purchased from supplier & workshop supplies)	$3,224.96
MCM #2 TOTAL COST	**$3,485.21**

Town of Emmitsburg

Minimum Control Measure #3

Illicit Discharge Detection and Elimination Plan

Minimum Control Measure (MCM) #3
Illicit Discharge Detection and Elimination Plan

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Illicit Discharge Detection and Elimination Plan is to identify and eliminate illicit storm drain system discharges. A permittee will satisfy this MCM by field screening storm drain system outfalls, inspecting the storm drain system to identify any source of an illicit discharge, eliminating any illegal connection or illicit discharge to the storm drain system, and enforcing penalties where appropriate.

BMP 3.1 – Storm Drain Infrastructure Map

- ***Requirement*:** Develop and maintain an updated map of the MS4 that identifies all stormwater conveyances, outfalls, stormwater best management practices (BMPs), and waters of the U.S. receiving stormwater discharges;

- ***Action Plan*:** The MS4 map can be found in the attached Illicit Discharge Detection & Elimination Plan (Attachment #1).

BMP 3.2 – Illicit Discharge Ordinance

- ***Requirement*:** Adopt an ordinance or other regulatory means that prohibits illicit discharges into the MS4.

- ***Action Plan*:** The Town adopted the County's MDE approved Stormwater Management Ordinance through Town Ordinance No. 01-18. Section 1-15.2-12.1. of the Stormwater Management Ordinance prohibits illicit discharges into the storm sewer system. Please see Section 1-15.2-12.1. attached below:

§ 1-15.2-12.1. PROHIBITED ACTIVITIES.

(A) *Illicit discharges.* Except as provided in subsection (B) of this section, a person shall not discharge an illicit discharge into an MS4, nor cause or allow an illicit discharge to be introduced or discharged into an MS4.

(B) *Exceptions.* The following discharges are exempt from the prohibitions set forth in subsection (A) of this section:

(1) Waterline flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensation; irrigation waters; springs; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; de-chlorinated swimming pool discharges (not including filter backwash); street wash water; and firefighting activities; or

(2) Discharges permitted under an NPDES stormwater discharge permit or a non-stormwater discharge permitted under an NPDES discharge permit.

In the event of any questions or complaints concerning the exceptions listed in subsection (B)(1) above, the Manager may take steps to determine if they are properly managed, and if not, may require mitigation measures necessary for proper management of these discharges.

(C) *Illicit connections.* A person shall not construct, use, maintain, or allow the continued existence of an illicit connection.

(D) *Interference.* A person shall not take or permit any action that interferes with, or is likely to interfere with, the proper operation of an MS4, including having or maintaining a prohibited material.

(E) *Reporting to Maryland Department of the Environment (MDE).* The county may report illicit connections and illicit discharges to MDE for enforcement and/or permitting in accordance with applicable law.

BMP 3.3 – Gaining Access to Private Property

- ***Requirement*:** Establish and document legal means for gaining access to private property to investigate and eliminate illicit discharges.

- ***Action Plan*:** The Town adopted the County's MDE approved Stormwater Management Ordinance through Town Ordinance No. 01-18. Section 1-15.2.12.2 of the Stormwater Management Ordinance establishes legal means for gaining access to private property to investigate and eliminate illicit storm drain system discharges. Please see Section 1-15.2-12.2 attached below:

§ 1-15.2-12.2. RIGHT OF ENTRY, INVESTIGATION, AND INSPECTION.

(A) *Generally.* Except as provided in subsection (B) of this section, if the county becomes aware of a discharge that enters, or is capable of imminent discharge to, or to be discharged from, an MS4 or a waterbody within the county, that may be or include prohibited material, or is the result of an illicit discharge or an illicit connection, the Manager may seek access to any premises at any reasonable time for the purpose of inspecting for a violation of this article.

(B) *Consent.* The Manager may enter private property to inspect for a violation of this article with the consent of the occupant or owner. If entry is refused, the Manager may request that the County Attorney seek a court order to permit entry to the property.

(C) *Investigations.* The Manager may inspect, sample, examine, and investigate the source, location, and extent of any spill, discharge, the existence of any illicit connection, the existence of any prohibited material, or the condition of any BMPs. In support of any investigation under this article, the Manager may review and copy any records that will assist in determining whether there is a violation of this article, including but not limited to, records maintained pursuant to the conditions of any discharge permit or approvals given under this chapter.

(D) *Follow up inspections.* To determine compliance with required abatement and mitigation measures, the Manager may conduct follow-up inspections of any premises from which the discharge or other violation may have occurred, as needed to assess the existence and extent of a violation of this article.

(E) *Threat to public health and safety.* The Manager shall have the right to enter any premises where there is evidence that a violation of this article exists which poses an immediate threat to the public health and safety for the purpose of performing duties pursuant to the provisions of this article. The Manager shall produce proof of identity prior to entry, and must also provide evidence of the imminent threat to public health and safety.

(F) *Emergency repairs.* If the Manager has evidence that an illicit discharge, illicit connection, or prohibited material presents an immediate threat to public health or safety, the Manager may enter the premises and make repairs in order to abate the public health or public safety hazard without prior written notice to the owner or occupant of the premises. The Manager may request that the County Attorney seek a court order assessing the costs of the abatement against the owner, tenant, licensee, or any other person causing or permitting an illicit discharge or illicit connection, or that has or is maintaining a prohibited material.

BMP 3.4 – Standard Operating Procedures (SOP)

- ***Requirement*:** Develop and implement written SOP.

- ***Action Plan*:** The SOP (Illicit Discharge Detection & Elimination Plan) is attached to this permit packet as Attachment #1.

BMP 3.5 – Submittal of SOP to MDE

- ***Requirement*:** Submit SOPs to MDE for review and approval.

- ***Action Plan*:** This task was completed in 2019. The manual was updated during this permit term to eliminate outfall NSA1, added Community Park SWM pond outfall as #25 – WLA4, and add Insurance Brokers of Maryland SWM pond outfall as #52 – EMS3.

BMP 3.6 – Documentation of Illicit Discharge Screening Efforts

- ***Requirement*:** Document results of illicit discharge screening efforts, including a description of how screening locations were prioritized and any necessary follow-up investigations, enforcement, and remediation measures implemented to address any suspected discharge. Submit to MDE in accordance with reporting requirements.

- ***Action Plan*:** This period's illicit discharge screening report is attached to this permit packet as Attachment #2.

- The following outfalls were inspected during this permit term:

    1. **Outfall ID:** CDK1

       Overall Outfall Characterization: Unlikely

    2. **Outfall ID:** CRC1

       Overall Outfall Characterization: Unlikely

    3. **Outfall ID:** ITC1

       Overall Outfall Characterization: Unlikely

    4. **Outfall ID:** ITD1

       Overall Outfall Characterization: Unlikely

    5. **Outfall ID:** ITR1

       Overall Outfall Characterization: Unlikely

    6. **Outfall ID:** NSA1

       Overall Outfall Characterization: Potential

       Follow-Up Actions Taken: Town sent an enforcement notice on August 10, 2020 notifying the potential property owner that an inspection is required to

determine ownership and source. Town staff inspected the property on 09/28/2020 and determined that the outfall was connected to a floor drain at the basement of 331 North Seton Avenue. The Town required the floor drain be cemented and the outfall capped. The work was completed and verified on October 13, 2020. Since the outfall was capped, it was removed from the IDDE/SOP Plan.

7. **Outfall ID:** PBC1

   Overall Outfall Characterization: Unlikely

8. **Outfall ID:** PBC2

   Overall Outfall Characterization: Unlikely

9. **Outfall ID:** PVP1

   Overall Outfall Characterization: Unlikely

10. **Outfall ID:** PVP2

    Overall Outfall Characterization: Potential

    Follow-Up Actions Taken: The Town sent an enforcement notice on August 10, 2020 notifying the owner that the excessive trash/debris and weeds/grasses in and around the outfall must be removed. The deficiencies are currently outstanding, and the Town has followed up with a second enforcement notice.

11. **Outfall ID:** PVP3

    Overall Outfall Characterization: Unlikely

12. **Outfall ID:** PVP4

    Overall Outfall Characterization: Potential

    Follow-Up Actions Taken: The Town sent an enforcement notice on August 10, 2020 notifying the owner that the excessive sediment/debris build-up in and around the outfall must be removed. The deficiencies are currently outstanding, and the Town has followed up with a second enforcement notice.

13. **Outfall ID: PVP5**

    Overall Outfall Characterization: Potential

    Follow-Up Actions Taken: The Town sent an enforcement notice on August 10,

2020 notifying the owner that the outfall is cracking at the bottom and must be repaired/replaced and sediment/debris build up in around the pipe must be removed. The deficiencies are currently outstanding, and the Town has followed up with a second enforcement notice.

14. **Outfall ID:** SHR5

    Overall Outfall Characterization: Unlikely

15. **Outfall ID:** TMR2

    Overall Outfall Characterization: Unlikely

16. **Outfall ID:** TMR3

    Overall Outfall Characterization: Potential

    Follow-Up Actions Taken: The Town sent an enforcement notice on August 10, 2020 notifying the owner that the sediment/debris build up in around the pipe and vegetation must be removed. The deficiencies are currently outstanding, and the Town has followed up with a second enforcement notice.

17. **Outfall ID:** TMR4

    Overall Outfall Characterization: Unlikely

18. **Outfall ID:** TMR5

    Overall Outfall Characterization: Unlikely

19. **Outfall ID:** WCC1

    Overall Outfall Characterization: Potential

    Follow-Up Actions Taken: The Town sent an enforcement notice on August 10, 2020 notifying the owner that the sediment/debris build up in around the pipe and vegetation must be removed. The deficiencies are currently outstanding, and the Town has followed up with a second enforcement notice.

BMP 3.7 – Records of the IDD&E Plan

- ***Requirement*:** Maintain complete records of the IDDE program investigations and make available to MDE during field reviews of the jurisdiction's MS4 program.

- ***Action Plan*:** This period's illicit discharge screening report is attached to this permit packet as Attachment #2.

Minimum Control Measure #3 - Illicit Discharge Detection and Elimination Costs

Description	Cost
Annual Illicit Discharge Screenings	$3,242.00
MCM #3 TOTAL COST	**$3,242.00**

Town of Emmitsburg

Minimum Control Measure #4

Construction Site Stormwater Runoff Control Plan

Minimum Control Measure (MCM) #4
Construction Site Stormwater Runoff Control Plan

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Construction Site Stormwater Runoff Control Plan is to comply with Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland and State erosion and sediment control regulations under COMAR 26.17.01. The statute and COMAR specify the requirements for any construction activity that disturbs 5,000 square feet or 100 cubic yards or more of earth movement.

BMP 4.1 – Adoption of a MDE Approved Ordinance

- ***Requirement*:** Adopt an MDE approved ordinance that includes a process for plan review and approval of proposed construction drawings and erosion and sediment control plans, and inspection and enforcement procedures in accordance with COMAR 26.17.01

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County for the implementation of an erosion and sediment control program. The Town adopted Frederick County's MDE approved Grading and Sediment Control Ordinance and authorized the County to administer and enforce its requirements within the Town's jurisdiction in 1977 (Ordinance 77-1). The County accepted this responsibility (Resolution No 85-20). The Frederick County's Soil Conservation District reviews and approves sediment control plans. It then enforces the sediment control as shown on the approved plan.

BMP 4.2 – Acceptance of a County Program

- ***Requirement*:** A municipality may accept the program that is being implemented by its respective county. Each permittee that relies on its respective county for the implementation of an erosion and sediment control program shall execute a binding agreement or resolution with said county. This agreement shall clarify respective roles of all parties related to plan review and approval, construction site inspections, and enforcement.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County for the implementation of an erosion and sediment control program (Ordinance 77-1 & Resolution 85-20).

Ordinance Series: 1977

Ordinance No.: 1

AN ORDINANCE ADOPTING THE GRADING AND SEDIMENT CONTROL ORDINANCE OF FREDERICK COUNTY FOR THE TOWN OF EMMITSBURG, MARYLAND

FIRST: WHEREAS, the Burgess and Commissioners of the Town of Emmitsburg have reviewed and considered the Grading and Sediment Control Ordinance of Frederick County, Maryland effective June y, 1977.

NOW THEREFORE, it is resolved by the Burgess and the Board of Commissioners of the Town of Emmitsburg, Maryland, that the Grading and Sediment Control Ordinance of Frederick County, Maryland is hereby adopted in full force and effect in the incorporated Town of Emmitsburg and Frederick County is hereby granted authority within the Town of Emmitsburg and may fully enforce all said legal provisions.

SECOND: It is further enacted and ordered that the ordinance shall be signed, executed, published and posted in accordance with Article II of the Code of Emmitsburg, and that this ordinance shall become effective as soon as such requirements are met.

ATTEST:

Regina Rybikowsky — 8-2-77 — J. Norman Flaps
Regina Rybikowsky — Date — President of the Board of Commissioners
Clerk

Regina Rybikowsky — 8-2 77 — Richard E. Spronkle
Regina Rybikowsky — Date — Burgess
Clerk

(APPROVED) Yes (VETOED)

I hereby certify that the foregoing ordinance has been published and posted in accordance with the requirements of Article II of the Code of Emmitsburg, making the effective date of this ordinance Aug. 14, 1977.

Regina Rybikowsky
Clerk

ATTACHMENT #2

THE EFFECTIVE DATE OF THIS RESOLUTION IS JUNE 4, 1985.

RESOLUTION NO. 85-20

Re: Sediment Control - Municipalities Adoption of County Ordinance and Administration of same by Frederick County

WHEREAS, Sections 8-1101 et.seq. Natural Resources Article of the Maryland Code provides for the delegation of the approval of grading and sediment control plans by municipalities to counties, and

WHEREAS, the municipalities of Woodsboro, Walkersville, Thurmont, Rosemont, Myersville, Brunswick and Emmitsburg have adopted Frederick County's Grading and Sediment Control Ordinance and have authorized the Board of County Commissioners by its Division of Public Works to administer the requirements and issue Grading and Sediment Control permits in the respective jurisdictions.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF FREDERICK COUNTY, MARYLAND, that the Board approves and accepts the Resolutions of Woodsboro, Walkersville, Thurmont, Rosemont, Myersville, Brunswick and Emmitsburg providing for the enforcement and administration of Grading and Sediment Control requirements by the Frederick County Division of Public Works in accordance with the provisions of the Maryland Code Article titled Natural Resources.

This Resolution was approved and adopted by the Board of County Commissioners on the 4th day of June, 1985.

ATTEST:

Kenneth R. Coffey
Administrative Assistant

BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

By: Galen R. Clagett
Galen R. Clagett
President

BMP 4.3 – Compliance with 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control & COMAR 26.17.01

- ***Requirement*:** Require compliance with requirements under *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control* or most recent revision and COMAR 26.17.01.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County to ensure compliance with the requirements under *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control* and COMAR 26.17.01.

BMP 4.4 – Necessary Permits Obtained

- ***Requirement*:** Ensure all necessary permits have been obtained, including MDE's General Permit for Stormwater Associated with Construction Activity for projects disturbing one acre or more and local sediment and erosion control plan approval.

- ***Action Plan*:** All permits are forwarded to the Office of Sustainability & Environmental Resources at Frederick County.

BMP 4.5 – Receiving, Investigating, and Resolving Complaints

- ***Requirement*:** Develop a process for receiving, investigating, and resolving complaints from any interested party related to construction activities within the jurisdiction. Notify the complainant of the investigation and findings within seven days.

- ***Action Plan*:** The Town Planner forwards all construction site stormwater runoff control complaints to the Office of Sustainability & Environmental Resources at Frederick County.

BMP 4.6 – Tracking Construction Sites

- ***Requirement*:** Track all active grading permits within the jurisdiction and report to MDE the disturbed areas for all active permits in accordance with reporting requirements.

- ***Action Plan*:** The following grading permits are active within the jurisdiction during this permit term:

    1. **Frederick County Grading Permit #:** 165204

       Address: Parcel ID 05166437

       Acres Disturbed: 15,000 sq. ft.

       Status of Site Compliance with Erosion Control Measures: Passing

Summary of Complaints and Resolutions: Failure to properly install silt fence (item was corrected), stabilization of disturbed area (area was temporarily stabilized).

If Potential, Suspect, or Obvious, Indicate Follow-Up Actions Taken: N/A

2. **Frederick County Grading Permit #:** 196764

   Address: 1419 Ramblewood Drive

   Acres Disturbed: 59,840 sq. ft.

   Status of Site Compliance with Erosion Control Measures: Passing. Permit is closed.

   Summary of Complaints and Resolutions: N/A

   If Potential, Suspect, or Obvious, Indicate Follow-Up Actions Taken: N/A

3. **Frederick County Grading Permit #:** 190844

   Address: Parcel ID: 05174546

   Acres Disturbed: 26,000 sq. ft.

   Status of Site Compliance with Erosion Control Measures: Passing

   Summary of Complaints and Resolutions: N/A

   If Potential, Suspect, or Obvious, Indicate Follow-Up Actions Taken: N/A

4. **Frederick County Grading Permit #:** 296272

   Address: Parcel ID: 05184371

   Acres Disturbed: 12,190 sq. ft.

   Status of Site Compliance with Erosion Control Measures: Passing

   Summary of Complaints and Resolutions: N/A

   If Potential, Suspect, or Obvious, Indicate Follow-Up Actions Taken: N/A

BMP 4.7 – Construction Site Inspections and Enforcement in Accordance with COMAR

- ***Requirement*:** Ensure that construction site inspections and enforcement procedures are performed in accordance with COMAR.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County to conduct construction site inspections and enforcement.

BMP 4.8 – Prevention and Reduction of Erosion and Sediment Pollution

- ***Requirement*:** Use procedures within existing municipal codes to help prevent and reduce erosion and sediment pollution into waters of the State from any construction activity.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County for the implementation of an erosion and sediment control program.

BMP 4.9 – Responsible Personnel Certification

- ***Requirement*:** Ensure staff is adequately trained on proper procedures and actions to address potential discharge of pollutants into the MS4 as a result of any construction activity.

- ***Action Plan*:** Eleven Town employees are adequately trained on proper procedures and actions to address potential discharge of pollutants into the storm drain system as a result of any construction activity. The following employees are Certified Responsible Personnel:

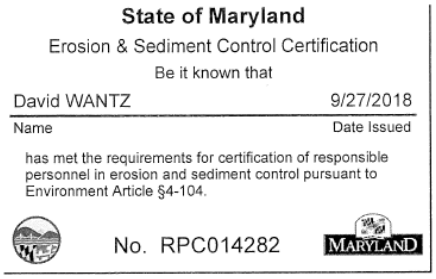
    - Amy Naill, Code & Parking Enforcement Officer
    - Cathy Willets, Town Manager
    - Zachary Gulden, Town Planner
    - Christopher Wantz, Public Works
    - David Wantz, Public Works
    - James Click, Public Works
    - Kenneth Sharrer, Public Works
    - Steve Fissel, Public Works
    - Dan Fissel, Sewer/Water Department

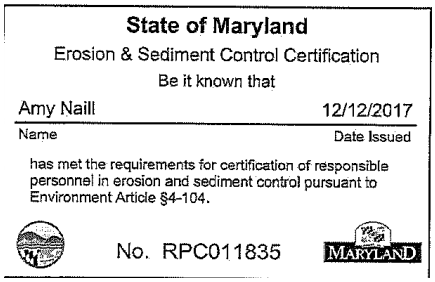
- Charles Fisher, Sewer/Water Department
- Jared Brantner, Sewer/Water Department

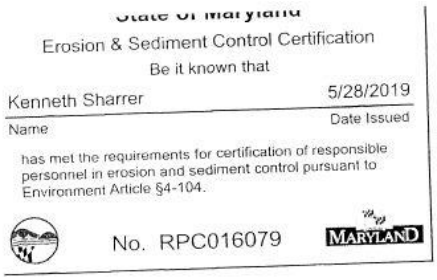

State of Maryland
Erosion & Sediment Control Certification
Be it known that
James CLICK 9/25/2018
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC014247
MARYLAND

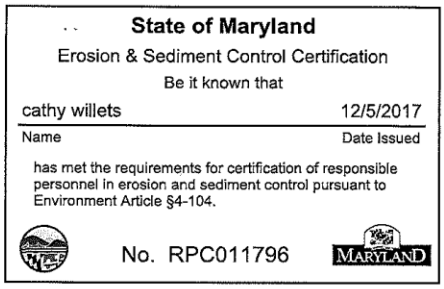

Erosion & Sediment Control Certification
Be it known that
Charles Fisher 5/28/2019
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC016080
MARYLAND

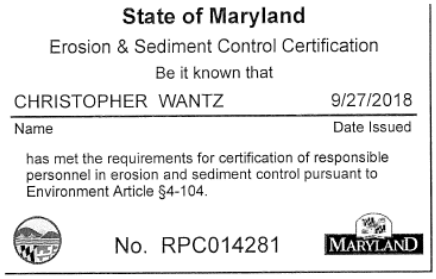

Erosion & Sediment Control Certification
Be it known that
Jared Brantner 5/28/2019
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC016081
MARYLAND

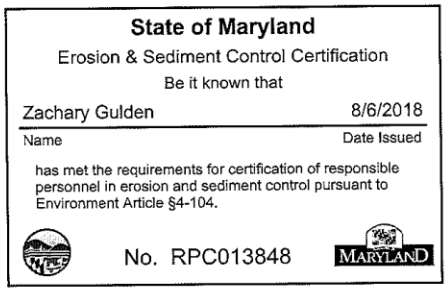

State of Maryland
Erosion & Sediment Control Certification
Be it known that
David WANTZ 9/27/2018
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC014282
MARYLAND


State of Maryland
Erosion & Sediment Control Certification
Be it known that
Amy Naill 12/12/2017
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC011835
MARYLAND


Erosion & Sediment Control Certification
Be it known that
Kenneth Sharrer 5/28/2019
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC016079
MARYLAND


State of Maryland
Erosion & Sediment Control Certification
Be it known that
cathy willets 12/5/2017
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC011796
MARYLAND


State of Maryland
Erosion & Sediment Control Certification
Be it known that
CHRISTOPHER WANTZ 9/27/2018
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC014281
MARYLAND


State of Maryland
Erosion & Sediment Control Certification
Be it known that
Zachary Gulden 8/6/2018
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC013848
MARYLAND


Erosion & Sediment Control Certification
Be it known that
steve Fissel 5/28/2019
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC016083
MARYLAND


Erosion & Sediment Control Certification
Be it known that
Dan Fissel 5/28/2019
Name Date Issued
has met the requirements for certification of responsible personnel in erosion and sediment control pursuant to Environment Article §4-104.
No. RPC016077
MARYLAND

Minimum Control Measure #4 - Construction Site Stormwater Runoff Control Costs

Description	Cost
N/A	$0.00
MCM #4 TOTAL COST	**$0.00**

Town of Emmitsburg

Minimum Control Measure #5

Post Construction Stormwater Management Plan

Minimum Control Measure (MCM) #5
Post Construction Stormwater Management Plan

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Post Construction Management Plan is to maintain an acceptable stormwater management program in accordance with Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland and State stormwater management regulations under COMAR 26.17.02. The Statute of and COMAR require that stormwater management shall be addressed for new development and redevelopment for any proposed project that disturbs 5,000 square feet or more.

BMP 5.1 – Adoption of an MDE Approved Ordinance

- ***Requirement*:** Adopt an MDE approved stormwater management ordinance that provides plan review and approval processes, and inspection and enforcement procedures that ensure proper construction and maintenance of BMPs in accordance with COMAR 26.17.02.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County for the implementation of the stormwater management program. The Town adopted the County's MDE approved Stormwater Management Ordinance and authorized the County to administer and enforce its requirements (see attachments – Ordinance No. 01-18). The County accepted this responsibility (see attachment – Resolution 02-29). The County reviews, approves, and inspects stormwater management facilities. This includes the required triennial SWM facility maintenance inspections after the facility is in operation.

BMP 5.2 – Acceptance of a County Program

- ***Requirement*:** A municipality may accept an MDE approved stormwater program that is being implemented by its respective county. Each permittee relying on the county for the implementation of a stormwater management program shall execute a binding agreement or resolution with said county. The agreement shall clarify respective roles of all parties related to stormwater plan review and approval, construction and post construction inspections, routine maintenance, enforcement, and BMP tracking.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County for the implementation of a post construction stormwater management program (Ordinance 01-18 & Resolution 02-29).

ORDINANCE SERIES 2001 PAGE 1 OF 3
ORDINANCE NO. 01-18

AN ORDINANCE TO AMEND

TITLE 15

OF THE CODE OF EMMITSBURG

ENTITLED

BUILDING AND CONSTRUCTION

****

BE IT RESOLVED, ENACTED AND ORDAINED, this 10th day of September 2001, by the Mayor and Board of Commissioners of the Town of Emmitsburg, Maryland, pursuant to the authority granted to them by the laws of Maryland and the Charter of the Town of Emmitsburg, that Title 15 Emmitsburg Municipal Code be amended by adding thereto Chapter 15.21

The amended section of this regulation read as follows with new wording indicated in BOLD CAPITAL letters and deleted words in [brackets]

WHEREAS, ON JUNE 5, 2001 FREDERICK COUNTY, MARYLAND ADOPTED A STORMWATER MANAGEMENT ORDINANCE DESIGNATED AS ORDINANCE 01-10-284 AND CODIFIED IN THE FREDERICK COUNTY CODE, CHAPTER 1-15.2 PURSUANT TO THE ENVIRONMENT ARTICLE, TITLE 4, SUBTITLE 2, ANNOTATED CODE OF MARYLAND (FORMERLY, THE NATURAL RESOURCES ARTICLE, TITLE 8, SUBTITLE 11A), AND

WHEREAS, THE TOWN OF EMMITSBURG HAS REVIEWED THE COUNTY'S ORDINANCE AND BELIEVES IT IS SATISFACTORY TO PROTECT THE LIVES AND PROPERTY OF EMMITSBURG RESIDENTS AND CITIZENS, AND

WHEREAS, FREDERICK COUNTY HAS STATED ITS WILLINGNESS TO ADMINISTER AND ENFORCE STORMWATER MANAGEMENT LAWS WITHIN THE CORPORATE LIMITS OF THE TOWN OF EMMITSBURG.

NOW, THEREFORE, BET IT RESOLVED, ENACTED AND ORDAINED BY THE MAYOR AND BOARD OF COMMISSIONERS OF THE TOWN OF EMMITSBURG, MARYLAND THAT THE EMMITSBURG MUNICIPAL CODE IS

BE IT FURTHER RESOLVED, ENACTED AND ORDAINED, that this Ordinance shall take effect on the 11th day of September 2001 and the Town Clerk shall post a copy

thereof at the Town Office and one other public place within the Town, as designated by the Mayor on the 11th day of September, 2001.

PASSED this 10th day of September, 2001.

ATTEST:

Donna Thompson, Town Clerk

Patrick Boyle
President of the Board of Commissioners

APPROVED this 10th day of September, 2001.

William H. Carr, Mayor

VETOED this _____ day of _____, 2001.

_____
William H. Carr, Mayor

I hereby certify that the foregoing Ordinance has been posted as required by Chapter 2.04 of the Emmitsburg Municipal Code, and as directed by the provisions off this Ordinance.

Date: 24 Sept 01

Donna Thompson, Town Clerk

ATTACHMENT #12

THE EFFECTIVE DATE OF THIS RESOLUTION IS November 21, 2002

RESOLUTION NO. 02-29

RESOLUTION OF
THE BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

Re: Providing Stormwater Management Services to Municipalities

RECITALS

On June 5, 2001, Frederick County adopted a Stormwater Management Ordinance (Ordinance No. 01-10-284) governing stormwater management in the County pursuant to the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland (formerly, the Natural Resources Article, title 8, Subtitle 11A); and

The City of Brunswick, Town of Emmitsburg, Town of Middletown, Town of Myersville, Town of Myersville, Town of New Market, Village of Rosemont, Town of Thurmont, and the Town of Walkersville have reviewed the County's Ordinance and have determined it is satisfactory to protect the lives and property of their residents; and

The municipalities listed above have adopted the County's Ordinance and any regulations adopted pursuant thereto; and

Frederick County is willing to administer and enforce the stormwater ordinance within the corporate limits of the municipalities listed above.

RESOLUTION

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF FREDERICK COUNTY, MARYLAND, that the County shall

pc: CAO, Hudak, Smith, Grossnickle, File

administer and enforce the provisions of its stormwater ordinance, Chapter 1-15.2 of the Frederick County Code and regulations promulgated thereunder, within the corporate limits of the City of Brunswick, Town of Emmitsburg, Town of Middletown, Town of New Market, Village of Rosemont, Town of Thurmont, and the Town of Walkersville under the terms and conditions as may be agreed to between the County and each municipality.

The undersigned hereby certifies that this Resolution was approved and adopted on the 21st day of November, 2002.

ATTEST:

Douglas D. Browning
Acting County Manager

BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

BY: David P. Gray (SEAL)
David P. Gray
President

11/21/02

File:r/pdm/dodr/Brief Stormwater Management Resolution Towns

BMP 5.3 – Implementation of the Maryland Stormwater Design Manual

- ***Requirement*:** Require that all new and redevelopment projects adhere to the design criteria performance standards in the latest version of the 2000 Maryland Stormwater Design Manual, Volumes I & II (Manual). This includes that environmental site design (ESD) be implemented to the maximum extent practicable (MEP).

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County to ensure compliance with the requirements under the 2000 Maryland Stormwater Design Manual, Volumes I & II (Manual).

BMP 5.4 – MS4 Progress Report

- ***Requirement*:** Maintain stormwater program implementation information and provide updates in accordance with the MS4 Progress Report that include:

    a. An Urban BMP database in accordance with the database structure in Appendix B, Tables B.1.a, b, and c. This information must be annually submitted to MDE with the MS4 Progress Report

    ***Action Plan*:** Please see the attached BMP database (Attachment #6).

    b. Total number of triennial inspections performed and verification that inspections occur at least once every three years;

    ***Action Plan*:** The County performed six triennial BMP inspections during this reporting term. The Town verified the re-inspection dates with the County. Please see Attachment #8 for a copy of the reports.

    c. Total number of violations notices issued and status of enforcement activities; and

    ***Action Plan*:** Please contact Frederick County for this information. Zero were issued at the Town level.

    d. Summary of routine maintenance activities for all publically owned BMPs. Maintenance plans must address periodic mowing, plant composition and health, trash and debris accumulation, sedimentation and erosion, dewatering, and overall function of the BMP in accordance with approved plans. Specify any actions taken to correct problems noted during routine maintenance activities.

    ***Action Plan*:** The Town owns the following BMPs:

    1. Emmitsburg Community Park – Filtration Basin (FR15POI000238)

    2. Emmitsburg Community Park, PH 1-CPv Pond (FR15POI000920)

The Town is in the process of creating a maintenance log for each of the BMPs to keep track of periodic mowing, plant composition and health, trash and debris accumulation, sedimentation and erosion, dewatering, and overall function of the BMP. The Town did contract with Magstone, LLC. in order to perform routine maintenance including 1) clean trash/storm drain pipes at filtration basin; 2) mow PH1 CPv Pond; and 3) repair dewatering device at the PH1 CPv Pond. The work took place on October 1, 2020 at a cost of $7,498.78.

BMP 5.5 – Staff Training

- ***Requirement*:** Provide training for staff on proper BMP design, performance, inspection, and routine maintenance. Report to MDE the number of trainings offered, topics covered, and number of attendees.

- ***Action Plan*:** The Town of Emmitsburg relies on Frederick County to fulfill this requirement.

Minimum Control Measure #5 - Post Construction Stormwater Management Plan

Description	Cost
Town Owned BMP Maintenance	$7,498.78
MCM #5 TOTAL COST	**$7,498.78**

Town of Emmitsburg

Minimum Control Measure #6

Pollution Prevention and Good Housekeeping Plan

Minimum Control Measure (MCM) #6
Pollution Prevention and Good Housekeeping Plan

Introduction

As part of the Town of Emmitsburg's Stormwater Management Program, the purpose of the Pollution Prevention and Good Housekeeping Plan is to develop and implement an operation and maintenance program that includes a training component to prevent and reduce pollutant runoff from municipal operations in accordance with CFR 40 § 122.34(b)(6).

BMP 6.1 – Staff Training

- ***Requirement*:** Ensure that appropriate staff and contractors receive training at least annually. The training must be designed to reduce or eliminate the discharge of pollutants during municipal operations. Training may include in-person, online, toolbox talks, on-the-job, or other formats, and permittees may build on existing training activities to fulfil this requirement. Topics must include spill prevention and response, proper disposal of waste, and periodic visual inspections to detect and correct potential discharges at properties owned or operated by the permittee.

- ***Action Plan:*** The Town held a mandatory training session for all employees on September 15, 2020. Detailed information on the training can be found in this report under BMP 1.4 – Annual Employee Training.

BMP 6.2 – Pollution Prevention Plan at Town Owned Properties

- ***Requirement*:** Develop, implement, and maintain a good housekeeping plan for permittee owned or operated properties where any of the following activities are performed: maintenance of vehicles or heavy equipment, and handling of any of the following materials: deicers, anti-icers, fertilizers, pesticides, road maintenance materials such as gravel and sand, or hazardous materials. A standard plan may be created to address multiple properties where similar activities are conducted provided the below items are addressed. The plan must include:
    a) A description of site activities;
    b) A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site;
    c) Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;
    d) Written procedures for corrective actions to address any release, spill, or leak on site; and
    e) Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.

- ***Action Plan*:** The Town's Pollution Prevention Plan is attached to this permit packet as Attachment #3. The Town owned properties include:

  22 East Main Street

  a) A description of site activities;
     - This site includes Sherriff Deputy offices, and it is the main storage facility for the Public Works Department. Items stored here include:
       - Four utility pick-up trucks
       - One dump truck
       - Push and riding lawn mowers
       - Weedwackers, chainsaws, and other gasoline powered tools
       - Hand tools
       - Street lights & supplies
       - Fire hydrants & supplies
       - Street sweepers
       - Snow plows
       - Road signs & supplies
       - Road salt spreaders
       - Backhoe
       - Construction equipment
       - Saws
       - Paint & stains
       - Pesticides
       - Vehicle wash supplies
       - Gasoline, oil, & lubricants
       - Antibacterial soap
       - Credit 41 non-selective herbicide
       - Neutro-wash
       - Lubri-seal

  b) A list of potential pollutants and their sources and locations, including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site.

     - Potential pollutants include:
       - Paint & stain
       - Pesticide
       - Vehicle washing supplies
       - Gasoline, oil, & lubricants
       - Antibacterial soap
       - Credit 41 non-selective herbicide
       - Neutro-wash
       - Lubri-seal

     - See below Stormwater Conveyance System map for 22 East Main

Street. The stormwater from this property ultimately flows to the stream called Willow Rill.

c) Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;

- Please see the attached Pollution Prevention Plan.

d) Written procedures for corrective actions to address any release, spill, or leak on site; and

- Please see the attached Pollution Prevention Plan.

e) Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.

- No discharges, releases, leaks, or spills were noted for this reporting period.

142 South School Lane

a) A description of site activities;

- This site includes a garage that is used as a miscellaneous storage facility for the Public Works Department. Items stored here include:
    - Water hose
    - Metal roofing
    - Lumber
    - LED lightbulbs
    - Push mower
    - Snow thrower
    - Generator
    - Trade lift
    - Christmas decorations
    - Green Clean Pro (treatment for Rainbow Lake)
    - Liquid Asphalt
    - Pool lift
    - Miscellaneous park equipment

b) A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site.

- Potential pollutants include:
    - Green Clean Pro
    - Liquid Asphalt
    - Gasoline, oil, & lubricants from the generator, trade lift, and push mower

- See below Stormwater Conveyance System map for 142 School Lane. The stormwater from this property ultimately flows into the gravel parking lot or grassy area and dissipates.

c) Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;

- Please see the attached Pollution Prevention Plan.

d) Written procedures for corrective actions to address any release, spill, or leak on site; and

- Please see the attached Pollution Prevention Plan.

e) Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.

- No discharges, releases, leaks, or spills were noted for this reporting period.

303 West Lincoln Avenue

a) A description of site activities;

- The Town leases this building to a church.

b) A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site.

- The only potential pollutants from this facility are common household cleaners.

- See below Stormwater Conveyance System map for 303 West Lincoln Avenue. The stormwater from this property ultimately flows into the large grassy area and dissipates.

Leased Property
201
413

c) Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;

- Please see the attached Pollution Prevention Plan.

d) Written procedures for corrective actions to address any release, spill, or leak on site; and

- Please see the attached Pollution Prevention Plan.

e) Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.

- No discharges, releases, leaks, or spills were noted for this reporting period.

201 West Lincoln Avenue

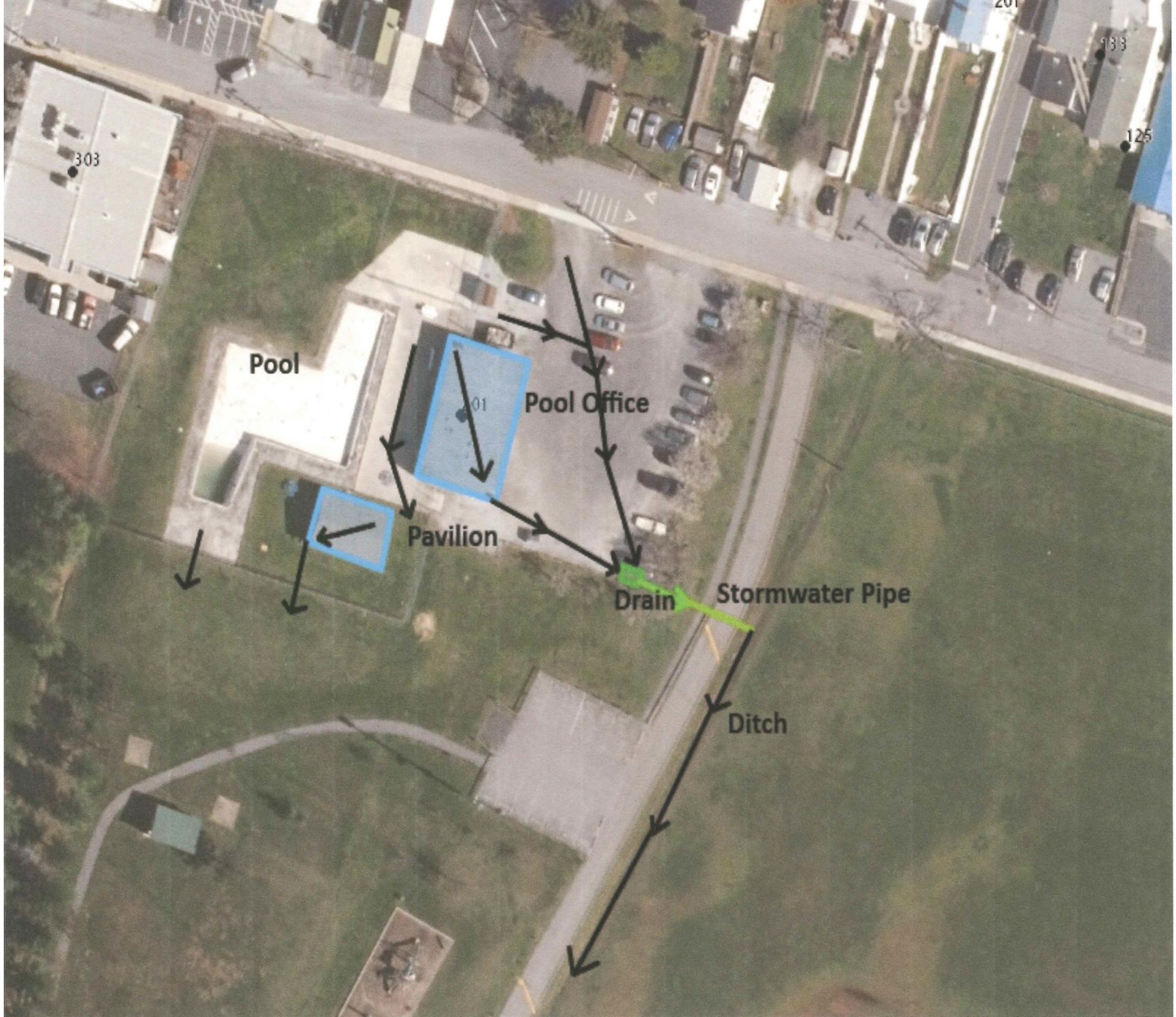
a) A description of site activities;

- Community Pool

b) A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site.

- Potential pollutants include:
  - Hot Shot Flying Insect Killer Spray
  - Wild Harvest All Purpose Cleaner
  - Essential Everyday Streak less Glass Cleaner
  - Lysol Bleach Toilet Bowl Cleaner
  - Fabuloso Multi-Purpose Cleaner
  - Clorox Cleanup
  - Muriatic Acid (Hydrochloric Acid)
  - Sodium Hypochlorite Solution
  - Odorless Charcoal Lighter
  - Sodium Bicarbonate
  - Calcium Chloride Flakes
  - Sodium Thiosulfate Pentahydrate
  - Chlorinating 1" Tablets

- See below Stormwater Conveyance System for 201 West Lincoln Avenue. The stormwater from this property ultimately flows into a stormwater drain that flows into a pipe under the road then to a ditch, which ultimately runs to the Willow Rill stream.


303
201
133
125
Pool
Pool Office
Pavilion
Drain
Stormwater Pipe
Ditch

c) Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;

- Please see the attached Pollution Prevention Plan.

d) Written procedures for corrective actions to address any release, spill, or leak on site; and

- Please see the attached Pollution Prevention Plan.

e) Documentation of any discharge, release, leak, or spill, including date, findings, and response actions.

- No discharges, releases, leaks, or spills were noted for this reporting period.

BMP 6.3 – Report Pollution Prevention Efforts

- ***Requirement*:** Quantify and report pollution prevention efforts related to the following activities;
    a) Number of miles swept and pounds of material collected from street sweeping and inlet cleaning programs;
    b) Good housekeeping methods for pesticide application such as integrated pest management plans or alternative techniques;
    c) Good housekeeping methods for fertilizer application such as chemical storage, landscaping with low maintenance/native species, and application procedures;
    d) Good housekeeping methods for snow and ice control such as use of pretreatment, truck calibration and storage, and salt dome storage and containment; and
    e) Other good housekeeping methods performed by the permittee not listed above.

- ***Action Plan*:**
    a) Number of miles swept and pounds of material collected from street sweeping and catch basin cleaning programs;
        - Please see next page for the street sweeping & catch basin cleaning logs. A total of 920 pounds or 0.46 tons were collected by mechanical street sweeping during this permit term. A total of 9,400 pounds or 4.7 tons were collected by catch basin cleaning.

Town of Emmitsburg Street Sweeping Log
10/31/2019 – 10/30/2020

Date	Location	Description of Work	Staff Members Involved	Pounds of Dry Materials Collected
November 26, 2019	Main Street	Mechanical Street Sweeping	Jim, Chris, Dave, Steve	250
December	Main Street	Mechanical Street Sweeping		
January 31, 2020	Main Street	Mechanical Street Sweeping	Jim, Chris, Dave, Steve	275
February 28, 2020	Main Street	Mechanical Street Sweeping	Jim, Chris, Dave, Steve	70
March – Covid19	Main Street	Mechanical Street Sweeping		0
April – Covid19	Main Street	Mechanical Street Sweeping		0
May 21, 2020	Main Street	Mechanical Street Sweeping	Jim, Chris, Dave,	70
June 25, 2020	Main Street	Mechanical Street Sweeping	Jim & Chris	50
July 30, 2020	Main Street	Mechanical Street Sweeping	Darrell	50
August 27, 2020	Main Street	Mechanical Street Sweeping	Dave & Darrell	75
September	Main Street	Mechanical Street Sweeping		0
October 1, 2020	Main Street	Mechanical Street Sweeping	Dave & Darrell	80
			TOTAL POUNDS	920

Report certified by the Town's Public Works Director Jim Click

Signature: Jim Click 10-7-2020

Town of Emmitsburg
300A South Seton Avenue, Emmitsburg, MD 21727
Phone: 301-600-6300 Fax: 301-600-6313

Town of Emmitsburg Catch Basin Cleaning Log

Date	Location	Description of Work	Staff Members Involved	Pounds of Dry Materials Collected
9-25-19	BY 301 MOUNTAINEERS WAY	Catch Basin Cleaning	CHRIS, DAVE, DARRELL	50
10-23-19	BY 305 MOUNTAINEERS WAY	Catch Basin Cleaning	CHRIS, DAVE, DARRELL	5
11-26-19	BY 309 MOUNTAINEERS WAY	Catch Basin Cleaning	CHRIS, DAVE, DARRELL	15
1-31-2020	IRISHTOWN RD	Catch Basin Cleaning	CHRIS & DAVE	150
2-28-2020	BY 9 IRISHTOWN RD	Catch Basin Cleaning	CHRIS & DAVE	10
3-2020	IRISHTOWN CT	Catch Basin Cleaning	DELAUTER & SONS	4.5 TONS 9000 pounds
7-30-2020	FRONT OF 101 IRISHTOWN RD	Catch Basin Cleaning	CHRIS, DAVE, & DARRELL	5
8-6-2020	FRONT OF 500 TIMBERMILL RUN	Catch Basin Cleaning	CHRIS, DAVE, DARRELL	150
10-6-2020	ACROSS FROM 7 IRISHTOWN RD	Catch Basin Cleaning	CHRIS, DAVE, DARRELL	15
		Catch Basin Cleaning		
		Catch Basin Cleaning		
		Catch Basin Cleaning		
Jen Clark 10-7-2020			**TOTAL POUNDS**	400 4.5 Tons

9400.00 pounds

Town of Emmitsburg
300A South Seton Avenue, Emmitsburg, MD 21727
Phone: 301-600-6300 Fax: 301-600-6313

b) Good housekeeping methods for pesticide application such as integrated pest management plans or alternative techniques;

- Please see page 10 of the Pollution Prevention Plan. A state certified contractor applies pesticides at Town owned property.

c) Good housekeeping methods for fertilizer application such as chemical storage, landscaping with low maintenance/native species, and application procedures;

- Please see page 10 of the Pollution Prevention Plan.

d) Good housekeeping methods for snow and ice control such as use of pretreatment, truck calibration and storage, and salt dome storage and containment; and

- Please see page 8 of the Pollution Prevention Plan.

e) Other good housekeeping methods performed by the permittee not listed above.

- Please see the Pollution Prevention Plan.

BMP 6.4 – Industrial Activity Coverage.

- ***Requirement*:** Submit in the NOI a list of properties owned or operated by the permittee where the activities listed in this MCM are performed, and indicate which are covered under the Maryland General Permit for Stormwater Discharges Associated with Industrial Activity. Provide an update in annual reports if the status of industrial activity permit coverage changes for any property.

- ***Action Plan*:** This requirement ensures that all other Town-owned facilities have NPDES permit coverage, if applicable. The following Town-owned buildings and their coverage under NPDES permits can be found below.

  - Water Treatment Plant – 8585 Crystal Fountain Road. The water treatment plan is regulated under NPDES permit # 11-DP-2364 and monitored as required.

  - Waste Water Treatment Plant (WWTP) – 16707 Creamery Road. The WWTP is regulated under NPDES permit # 09-DP-0113.

  - Pump Station – 17700 Creamery Road - All materials are routed to the WWTP.

Minimum Control Measure #6 - Pollution Prevention and Good Housekeeping Plan

Description	Cost
N/A	$0.00
MCM #6 TOTAL COST	**$0.00**

Town of Emmitsburg, Maryland Official

Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads Plan

Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads Plan

Introduction

Maryland's Watershed Implementation Plan (WIP) specifies the nutrient and sediment load reductions required to address the Chesapeake Bay total maximum daily load (TMDL) by 2025. This general permit will make progress toward that strategy by requiring small MS4s, like Emmitsburg, commence restoration efforts for twenty percent of existing developed lands that have little or no stormwater management. This five-year permit term will require permittees to develop planning strategies and work toward implementing water quality improvement projects. Restoration planning strategies and implementation schedules required under this general permit are consistent with addressing the water quality goals of the Chesapeake Bay TMDL by 2025. The conditions established below require permittees to perform watershed assessments, identify water quality improvement opportunities, secure appropriate funding, and develop an implementation schedule to show the twenty percent impervious area restoration requirement that will be achieved by 2025. This constitutes adequate progress toward compliance with Maryland's receiving water quality standards and any stormwater WLA established or approved by EPA for small MS4s regulated under this permit.

- ***Requirement A*:** Develop a Baseline Impervious Assessment. The following information shall be submitted with this assessment:

    1. Total impervious acres in accordance with guidance in Appendix B, Section III of this general permit;
    2. Total impervious acres treated by water quality BMPs;
    3. Total impervious acres treated by BMPs providing partial water quality treatment;
    4. Total impervious acres treated by nonstructural practices (i.e., rooftop disconnections, non-rooftop disconnections, or vegetated swales);
    5. Verification that any impervious area draining into BMPs with missing inspection records are not considered treated; and
    6. Total impervious acres untreated and twenty percent of this total area (i.e., the restoration requirement).

- ***Action Plan*:** The Town contracted with Greenman-Pedersen, Inc. of Columbia, Maryland to create and update the Baseline Impervious Assessment. The assessment was updated per MDE comments on last year's Final Report. The Baseline Impervious Assessment is attached to this permit packet as Attachment #4.

- ***Requirement B*:** Develop and Implement an Impervious Area Restoration Work Plan.

  Permittees shall submit a work plan with the first year annual report to describe the activities and milestones that will be performed over the permit term to show progress toward the twenty percent impervious area restoration requirement.

- ***Action Plan:*** The Impervious Area Restoration Work Plan has been updated and is attached to this permit packet as Attachment #5.

- ***Requirement C*:** Develop a Restoration Activity Schedule and provide annual updates on the status of the projects in the planning, construction, and final phase of implementation.

- ***Action Plan:*** The Restoration Activity Schedule has been updated and is attached to this permit packet as Attachment #5.

- ***Requirement D*:** Permittees are required to develop a BMP inventory consistent with the required fields outlined in the BMP Database provided in Appendix B, Table B.1. a, b, and c. A brief narrative shall accompany the BMP database and provide verification that routine inspections and maintenance activities are up to date. The database fields for inspection and maintenance need to be completed and show that BMPs are inspected every three years and properly maintained.

- ***Action Plan:*** Please see Attachment #6 for the BMP inventory.

Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads Plan

Description	Cost
Baseline Impervious Assessment Updates Per MDE Comments	$517.50
Silo Hill SWM Basin Retrofit Project	
Grant Funding Assistance	$4,500.00
Existing Conditions Survey	$3,500.00
Geotechnical Testing	$7,500.00
TOTAL COST	**$16,017.50**

Town Expense Report
October 31, 2019 through October 30, 2020

Description	Cost
MCM #1	$4,452.75
MCM #2	$3,485.21
MCM #3	$3,242.00
MCM #4	$0.00
MCM #5	$7,498.78
MCM #6	$0.00
Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads	$16,017.50
TOTAL	$34,696.24