NORTH YORK BOROUGH MS4 PRESENTATION 02-13-2024

The following is a summary of the MS4 presentation given at the North York Borough:

- Public presentation is a requirement under the Borough's MS4 Stormwater Permit. An overview was given of the permit which consists of the following six Minimum Control Measures:

  MCM #1: Public Education and Outreach on Stormwater Impacts (PEOP)
  MCM #2: Public Involvement/Participation (PIPP)
  MCM #3: Illicit Discharge Detection and Elimination (IDD & E)
  MCM #4: Construction Site Runoff Control
  MCM #5: Post-Construction Stormwater Management (PCSM) In New and Re-Development Activities.
  MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations

  The goal of the Stormwater Management Program, above Minimum Control Measures and the MS4 General Permit is to reduce stormwater pollution in order to improve water quality in the local waterbodies and ultimately the Chesapeake Bay. The program provides for public education, requests public involvement and provides a means for the Borough to control stormwater discharges within the Borough limits.

- The concentration of this presentation is on control measure #1 public education and outreach and control measure #2 public involvement and participation. It will also touch upon control measure #3 illicit discharge detection and elimination.

- An update was given on the program/permit status. The permit renewal was submitted to DEP on September 14, 2017. The PAG-13 (Stormwater Discharges from Small Municipal Separate Storm Sewer Systems MS4) Permit was issued on December 22, 2020. North York Borough is a member of the York County Regional Intergovernmental Cooperation Agreement for the York County Regional Chesapeake Bay Pollution Reduction Plan. This is due to the fact that all participating municipalities are using the same pollution reduction plan to meet the required pollution reductions.

  Even though none of the projects are located within the borough, the borough by participating in the group, receives credit for meeting their pollution reduction plan requirements. The borough participating in this regional group comes at a great savings to the borough compared to doing their own plan.

  We submitted the 2023 year-end report to DEP by September 30, 2023 which covered the period from July 1, 2022 to June 30, 2023. A copy of the report is available at the borough office and on the borough website.

- With the Borough's adoption of their Stormwater Management Ordinance that is consistent with the York County Model Stormwater Management Ordinance that was approved by DEP per the Pennsylvania Stormwater Management Act 167. Any Regulated Activity (any earth disturbance activities or any activities that involve the alteration or development of land that may affect stormwater runoff) must address the stormwater runoff rate and volume. Runoff volume is usually addressed by infiltration practices.

- Following the summary of the program status, public education/outreach was discussed.

- One of the most important aspects of the permit is to educate the public about stormwater and what affects stormwater pollution has on streams, waterways, bays and ultimately oceans. In the lobby of the borough office, there is a bulletin board and spindle rack which is solely dedicated to stormwater information. Copies of any of the information on the bulletin board and spindle rack will be provided upon request. The borough website has also been updated with additional information under the stormwater management tab. In November-December of 2023, a local teacher had her elementary students do research on the water cycle, and they ended up on the borough's stormwater page. The borough may also mail newsletters which also has information on stormwater pollution. There are also several handouts on the table in the back of the room with additional stormwater information.

The purpose of the educational material is to educate people so they understand stormwater pollution and to change the way people are used to doing their everyday chores to prevent and eliminate stormwater pollution. Most people don't think about stormwater and what impacts are created in streams and rivers once it disappears into the storm sewer. If everyone performs some simple things, it can reduce stormwater pollution, such as cleaning up pet wastes from yards or sidewalks, keeping grass clippings out of the street so they are not washed into the storm sewer, eliminating fluid leaks from vehicles, not overfertilizing lawns, composting, use rain barrels to water plants and gardens, washing vehicles at a commercial car wash or over a lawn area and cleaning up any deicing salts from sidewalks and driveways.

The following are some other resources for stormwater information:

Chesapeake Bay Foundation are expanding a program called "Learn Outside, Learn at Home" which has educational information online on their website.

DEP has established a Clean Water Academy on their website that has courses online to learn more about the MS4 permit and its requirements. The website also has some instructional videos.

- Another important aspect of the program is for the borough to solicit public involvement/participation in the program. Some ways to participate in preventing stormwater pollution are organizing or participating in stormwater inlet stenciling or stream cleanups. Stenciling or stream cleanups can be through volunteers, service projects, community service. (An example of what inlet stencils look like was shown at the meeting.) Anyone interested in organizing a stream cleanup or stormwater inlet stenciling program should please contact the borough. Some of the borough's inlets have been marked with a metal disk but not all.

  The Watershed Alliance of York (WAY) and the Chesapeake Bay Foundation have opportunities available for volunteering. Links to their websites can be found on the borough's website.

  York County Coalition for Clean Waters has been formed as part of the county planning commission. They have volunteer opportunities available to participate.

  Another source of information and opportunities for volunteering is through the Penn State Extension.

  Reporting of illicit discharges is another important way to provide public participation in the stormwater program. An illicit discharge is any discharge other than stormwater to the borough streets and storm sewer system with some exceptions. If you see anything you suspect to be an illicit discharge, please contact the borough by phone or there is a citizen complaint form at the borough office or available on the borough website that can be filled out and submitted to the borough. (A copy of the form was shown). The borough will then investigate the complaint and if it was an illicit discharge, will go through the procedures to ensure it is corrected.

  If an illicit discharge is encountered by borough personnel that cannot be traced to a source, the borough will utilize a door hanger which describes that an illicit discharge was found in the area, describes what an illicit discharge is and gives ways to prevent illicit discharges. (A sample of the doorhanger was shown).
  The reporting of illicit discharges is an important way to help the borough since the borough has few employees and the chances of them seeing an illicit discharge is small. An emphasis is placed on not putting yourself in a position of confrontation with an illicit discharge. If needed take pictures and submit with the complaint form. Do not confront anyone.

  The borough does an annual inspection of the actual outfalls to the Codorus Creek and Willis Run but the chances of finding an illicit discharge are small.

- Copies of all the information discussed during the presentation was provided at the meeting and will be available from the Borough office or the Borough Engineer. It will be placed on the bulletin board or the spindle rack in the Borough office.

CITIZEN COMPLAINT
ILLICIT DISCHARGE REPORTING FORM

Name: _____ **Contact Phone Number:** _____

Date: _____ **Time Discharge Discovered:** _____

Date of Last Rain Event: _____ **Estimated Quantity of Rain:** _____ **in.**

LOCATION OF DISCHARGE (Indicate nearby street intersections, addresses, and/or landmarks for reference): _____

_____

_____

WHERE WAS DISCHARGE FOUND? OPEN DITCH STREAM PIPE OUTFALL OTHER: _____

WAS WATER FLOW OBSERVED? NO YES

WAS FLOW SOLID OR PULSING? SOLID PULSING

WAS A PHOTO TAKEN? NO YES (Please attach a copy to form)

ODOR: NONE MUSTY SEWAGE ROTTEN EGGS SOUR MILK OTHER: _____

COLOR: CLEAR RED YELLOW BROWN GREEN GREY OTHER: _____

CLARITY: CLEAR CLOUDY OPAQUE

WAS THERE AN:
OILY SHEEN YES NO
GARBAGE/SEWAGE YES NO
OTHER: _____

ADDITIONAL INFORMATION TO ASSIST IN THE INVESTIGATION: _____

_____

_____

Follow up Investigation (to be completed by CCD staff)

OUTFALL NO: _____ **INSPECTOR NAME** _____ **PHONE** _____

FIELD ANALYSIS:

WATER TEMP: _____ °F / °C
pH: _____
PHENOL: _____ mg/l
CHLORINE (Total): _____ mg/l
COPPER: _____ mg/l
DETERGENTS: _____ mg/l

WAS A LABORATORY SAMPLE COLLECTED? NO YES
(If yes attach copy of chain-of-custody record)

COMMENTS: _____

_____

_____

DATA SHEET FILLED OUT BY: (signature): _____ DATE: _____

Additional notes to file: _____

_____

_____

Follow-up with Complainant: _____

_____

_____

What is Storm Water?

Storm water is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground or drains into what we call storm sewers. These are the drains you see at street corners or at low points on the sides of streets. Collectively, the draining water is called storm water runoff.

Good Rain Gone Wrong

Storm water becomes a problem when it picks up debris, chemicals, dirt, and other pollutants as it flows or when it causes flooding and erosion of stream banks. Storm water travels through a system of pipes and roadside ditches that make up storm sewer systems. It eventually flows directly to a lake, river, stream, wetland, or coastal water. All of the pollutants storm water carries along the way empty into our waters, too, because storm water does not get treated!

Pet wastes left on the ground get carried away by storm water, contributing harmful bacteria, parasites and viruses to our water.

Vehicles drip fluids (oil, grease, gasoline, antifreeze, brake fluids, etc.) onto paved areas where storm water runoff carries them through our storm drains and into our water.

Chemicals used to grow and maintain beautiful lawns and gardens, if not used properly, can run off into the storm drains when it rains or when we water our lawns and gardens.

Waste from chemicals and materials used in construction can wash into the storm sewer system when it rains. Soil that erodes from construction sites causes environmental degradation, including harming fish and shellfish populations that are important for recreation and our economy.

Where to Go to Continue the Information Flow

Your community is preventing storm water pollution through a storm water management program. This program addresses storm water pollution from construction, new development, illegal dumping to the storm sewer system, and pollution prevention and good housekeeping practices in municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our water is ... water! Contact your community's storm water management program coordinator or the Pennsylvania Department of Environmental Protection for more information about storm water management.

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www.dep.pa.gov

3850-BO-DEP5278 4/2020 G2421-APR20

Answers to Test Your Storm Sewer System Savvy:

1. Ditch – Part of the storm sewer system. Most people think that the system is just a series of underground pipes. It can also include ditches used to convey storm water from the land to a receiving lake, river, or stream.

2. Fire Hydrant – Not part of the storm sewer system. Water sprayed on fires is not regulated as storm water, but if water systems open hydrants to flush their water lines the chlorinated water should not be allowed to enter a stream.

3. Storm Drain Inlet – Part of the storm sewer system. Anything that enters this drain will go directly to streams, rivers or lakes without being treated first. It is important to recognize this as a storm drain to prevent it from being used as a trash can.

4. Storm Sewer Outfall – Part of the storm sewer system. An outfall is where storm water drains from the storm sewer system into a receiving lake, stream, or river. If there is a flow from an outfall when it isn't raining, there could be a problem with the system or someone has used a storm drain for illegally disposing of materials.

5. Toilet – Not part of the storm sewer system. Wastewater from sinks and toilets in houses and businesses travels through a sewer system designed to carry wastewater.

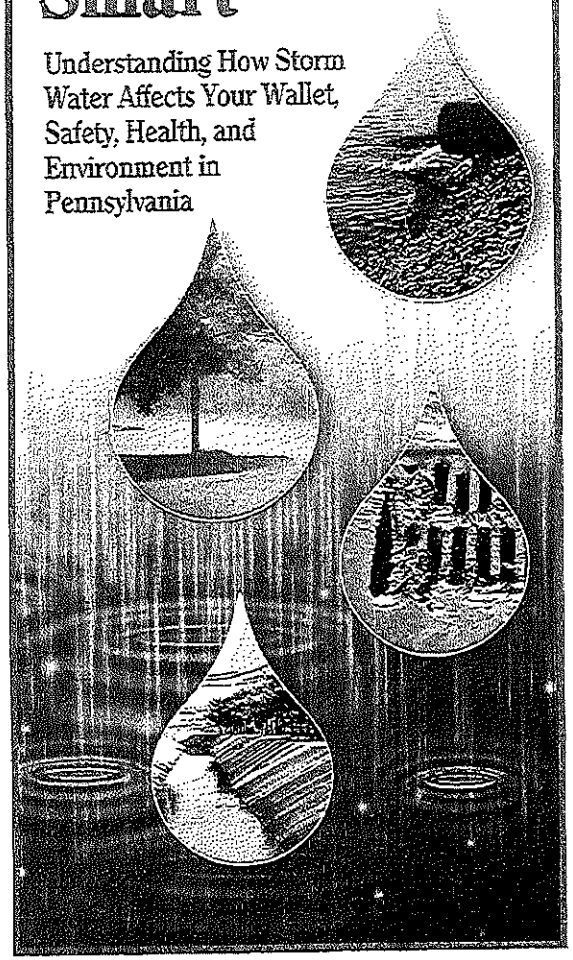
6. Septic System – Not part of the storm sewer system. Homeowners use septic tanks to manage sanitary wastes on-site. Improperly maintained septic systems can leak and contribute pollutants to the storm sewer system, as well as directly to lakes, rivers, and streams.

7. Roads and Other Paved Areas – Source of much of the flow to storm sewer systems. Roads and other maintained surfaces such as parking lots and sidewalks can accumulate pollutants (e.g. oil, grease, dirt, leaves, trash, pet wastes) that storm water eventually washes into the storm sewer system.

8. Protected Storm Drain Inlet – Where construction or other activities cause sediment or other pollutants to flow to an inlet, sandbags or filters can be used to mitigate.

Be Storm Water Smart

Understanding How Storm Water Affects Your Wallet, Safety, Health, and Environment in Pennsylvania



What Happens When It Rains?

Rain is an important part of nature's water cycle, but there are times it can do more damage than good. Problems related to storm water runoff can include:

Flooding caused by too much storm water flowing over hardened surfaces such as roads and parking lots, instead of soaking into the ground.

Increases in spending on maintaining storm drains and the storm sewer system that become clogged with excessive amounts of dirt and debris.

Decreases in sportfish populations because storm water carries sediment and pollutants that degrade important fish habitat.

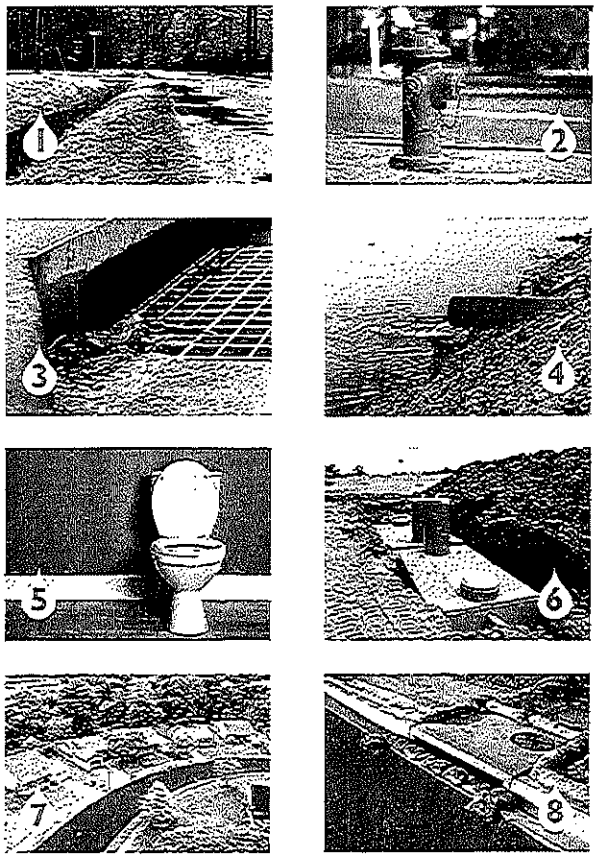
More expensive treatment technologies to remove harmful pollutants carried by storm water into our drinking water supplies.

Closed beaches due to high levels of bacteria carried by storm water that make swimming unsafe.

We can help rain restore its good reputation while protecting our health and environment while saving money for ourselves and our community. Keep reading to find out how...

Test Your Storm Sewer System Savvy!

What does the storm sewer system look like in your community? See if you can identify which pictures are part of the storm sewer system (Answers are on the back.)



Restoring Rain's Reputation: What Everyone Can Do To Help

Rain by nature is important for replenishing drinking water supplies, recreation, and healthy wildlife habitats. It only becomes a problem when pollutants from our activities like car maintenance, lawn care, and dog walking are left on the ground for rain to wash away. Here are some of the most important ways to prevent storm water pollution:

- Properly dispose of hazardous substances such as used oil, cleaning supplies and paint—never pour them down any part of the storm sewer system and report anyone who does.
- Use pesticides, fertilizers, and herbicides properly and efficiently to prevent excess runoff.
- Look for signs of soil and other pollutants, such as debris and chemicals, leaving construction sites in storm water runoff or tracked into roads by construction vehicles. Report poorly managed construction sites that could impact storm water runoff to your community. (See the back of this brochure for contact information.)
- Install innovative storm water practices on residential property, such as rain barrels or rain gardens, that capture storm water and keep it on site instead of letting it drain away into the storm sewer system.
- Report any discharges from storm water outfalls during times of dry weather—a sign that there could be a problem with the storm sewer system.
- Pick up after pets and dispose of their waste properly. No matter where pets make a mess—in a backyard or at the park—storm water runoff can carry pet waste from the land to the storm sewer system to a stream.
- Store materials that could pollute storm water indoors and use containers for outdoor storage that do not rust or leak to eliminate exposure of materials to storm water.

What to Do With

GRASS CLIPPINGS

Bagging Clippings

PROS: Greater Lawn, Better Surface for Sports, Cleaner Striping

CONS: Extra Work to Dispose of Clippings, Remove Minerals from Lawn

Leave Clippings On the Lawn

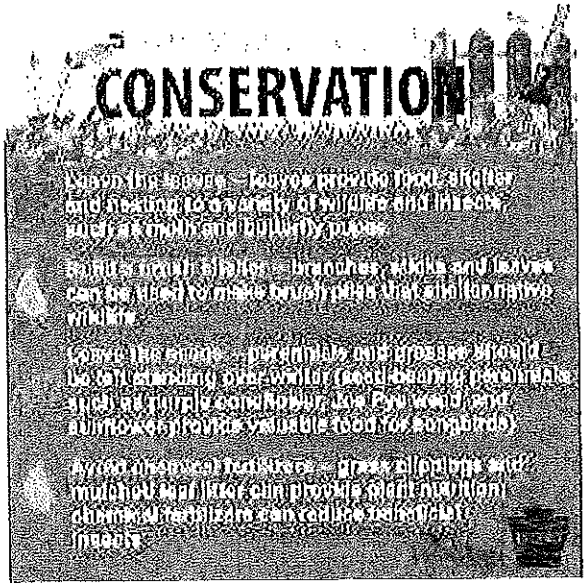
PROS: Return Minerals from Cut Grass, No Need to Dispose of Clippings, Keep Clippings Out of Landfills

CONS: Less Neat, Clipping Can Be Slippery, Must Mow Often to Avoid Long Clippings

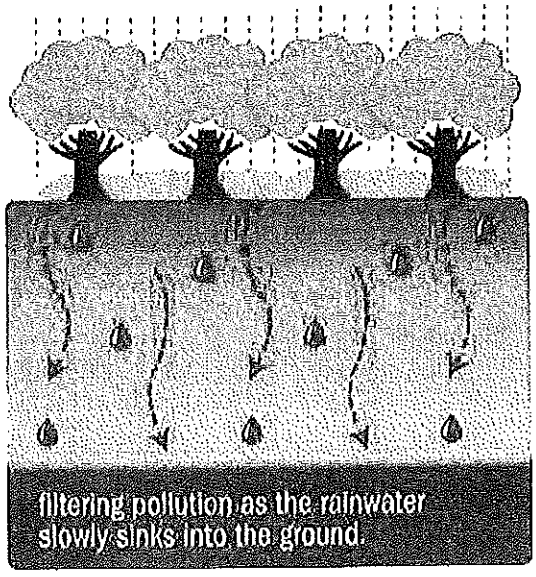
When NOT to Leave Clippings

- Wet Grass
- After Applying Herbicide
- Clipping Getting Into Storm Drains
- Disease Infested Grass

www.totalgrasscare.com

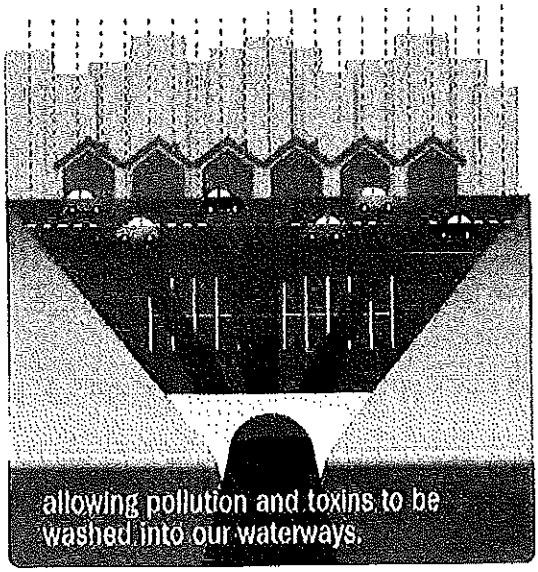


The landscape can be a
GREEN FILTER



filtering pollution as the rainwater slowly sinks into the ground.

or a
GRAY FUNNEL



allowing pollution and toxins to be washed into our waterways.

DUMP NO WASTE

DRAINS TO RIVER

PROTECT YOUR RIVER

Stormwater carries polluted runoff down your local storm drain and straight to your river!

You can prevent pollution!

- Use less fertilizer on lawns
- Avoid pesticides
- Compost garden trimmings
- Recycle used oil
- Wash your car on the lawn, not driveway or street
- Pick up pet wastes
- Don't litter
- Bring your leftover paints and pesticides to HazoHouse or Household Hazardous Waste collection days
- For more information call your local public works office at:

Earthwater® STENCILS, Ltd.

http://www.earthwater-stencils.com

PROTECT
OUR
WATERSHED

KEEP IT CLEAN

DRAINS TO RIVER

grasscycling

for a low-maintenance lawn

Grass clippings make up a large percentage of the household waste produced each year. About 1,000 square feet of lawn can produce 200 to 500 pounds of clippings during a Pennsylvania growing season.

Grasscycling is a simple alternative to bagging grass clippings. Simply leave the clippings on your lawn, where they break down in 7 to 14 days. The grass clippings act as top-dressing fertilizer and help keep your lawn green and healthy.

grasscycling tips

- Mow when grass is not wet and use a sharp mower blade.
- Don't let large clumps of grass clippings accumulate on the lawn.
- Don't overuse harsh chemicals and fertilizers. Look for organic brands.
- If possible, use a mulching mower that chops the clippings into smaller pieces.

Use grass clippings as a surface mulch around vegetables or flowers to inhibit weed growth and retain soil moisture. Remember to keep clippings at least two inches away from young plants to avoid burning the new growth with excess nitrogen.

Add grass clippings to your compost pile for extra nutrients and to speed up the composting process. To avoid odors, grass clippings should comprise no more than one-third of the pile.

DEP, Bureau of Waste Management
Division of Waste Minimization & Planning
P.O. Box 8472
Harrisburg, PA 17105-8472

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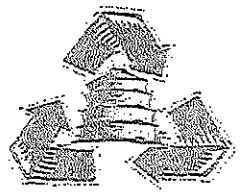
guide to home composting

Practice the 4Rs of organic waste management for a healthier yard and garden:

- **Reduce yard waste:** Grasscycle by leaving grass clippings on the lawn.
- **Reuse yard waste:** Use leaves as mulch and put brush chip and wood waste to use as ornamental mulch and weed control.
- **Recycle yard and food waste:** Compost organic wastes to produce mulch and valuable soil conditioner.
- **Respond** by telling others about the benefits of composting at home.



the basics of home composting

Composting is a natural process in which microorganisms break down organic materials - such as leaves, grass and vegetable scraps - to form a rich, soil-like substance.

key elements

- **Organic Materials** - A good mix of materials for successful composting consists of two parts "browns" (materials such as dead leaves that are high in carbon) and one part "greens" (such as fresh grass clippings and garden prunings that are high in nitrogen).
- **Moisture** - Composting materials should feel moist like a damp sponge but not overly soggy.
- **Temperature** - Compost should feel warm to the touch except in cold winter months.
- **Air** - When materials decompose without oxygen, they can create unpleasant odors. Turn compost regularly to ensure that air reaches the center of the pile.

ingredients

"browns"	"greens"	Microorganism sources
leaves	grass	old compost
dead plants	green weeds	garden soil
straw	manure	farm animal manure
shredded paper	coffee grounds	commercial compost starters
shredded twigs	kitchen scraps (non-meat, non-dairy, nonfat)	
sawdust (untreated wood)		

getting started

A 4'x4'x4' area out of direct sunlight is ideal for a compost pile. Choose an easily accessible spot on a grass or soil base. Composting can begin any time of the year, but it is easy to start in the fall, when leaves are abundant. Mix the ingredients and add water so the materials feel as damp as a wrung-out sponge.

Add a shovelful of garden soil or finished compost to the compost pile. This adds the essential microorganisms needed to break down the waste into compost.

The pile should be turned after a few weeks so that outside ingredients are exchanged with the ingredients from the center of the pile. Turn compost piles about once a month, except in cold winter conditions. If more water is necessary, it can be added during turning.

using compost

Compost is ready for use when it looks dark and crumbly and none of the starting ingredients are visible. One way to test if compost is finished is to seal a small sample in a plastic bag for 24 to 48 hours. If no strong odors are released when you open the bag, the compost is finished and ready to be used.

As a soil amendment, compost increases water retention, adds nutrients and increases soil health. Work it into the top 6 to 8 inches of the soil when planting. Compost can also be applied as a mulch directly around the base of trees and shrubs.

compost troubleshooting

problem	solution
too wet	Turn, add dry material; cover compost
dry, appears dusty	Turn, water, shade compost
cool to the touch	Turn, add "greens"
too warm to the touch, strong odors	Turn, add soil or "browns"; add water
strong odors	Turn; add "browns"

Don't compost:

- **Diseased plants or leaves**
- **Plants that have gone to seed**
- **Persistent weeds (poison ivy, multiflora rose, blindweed, quackgrass)**
- **Meat, dairy products and kitchen vegetables cooked with animal fats.**
- **Human or pet feces**
- **This brochure—recycle it! After you have read it, pass it on to a friend or shred and compost it.**

For more information, visit www.dep.state.pa.us, keyword: Composting.

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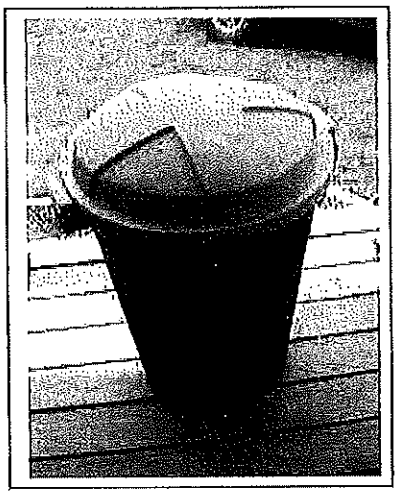
BUREAU OF WASTE MANAGEMENT

2520-PA-DEP2640 Rev. 2/2015

Garbage Can Composting Bin

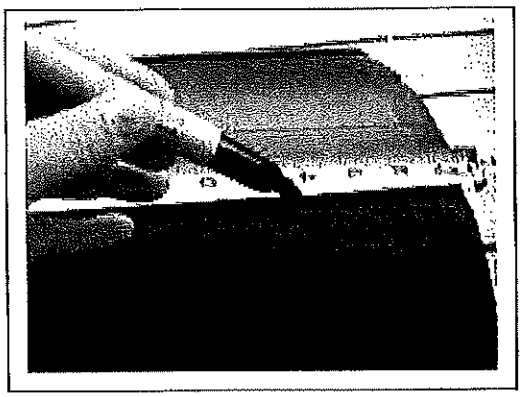
One of the cheapest and easiest compost bins you can build is the Garbage Can Bin.



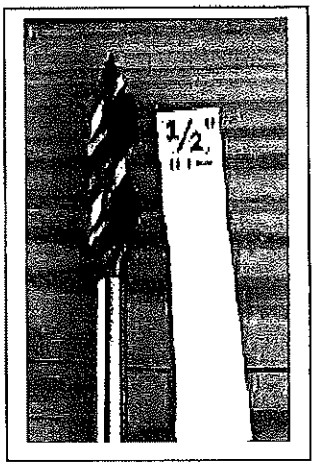
Materials List:

- **1 – 32 gallon or larger garbage can with an attachable / lockable lid,** (one that will not come off in a strong windstorm).
- **A drill, corded or cordless.**
- **A tape measure.**
- **A marking instrument,** (pen, marker).
- **A ½ inch drill bit, metal or wood.**
- **Safety equipment,** (safety glasses and such).

You can purchase a 32 gallon garbage can from your local department store, Home Depot, Lowes or hardware store for $12 - $15. (Make sure you get a lid with the can)

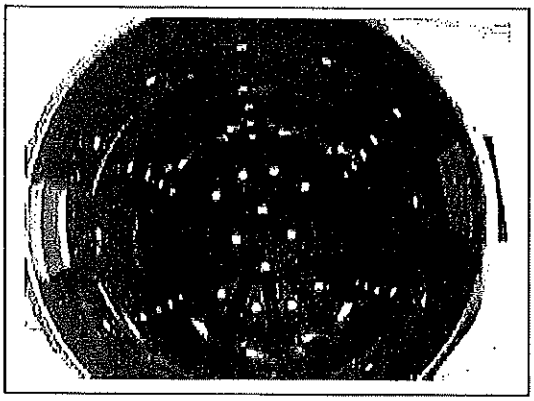


Start by drilling half-inch holes at five or six inch intervals around the perimeter and length of the can. These will help aerate your pile.

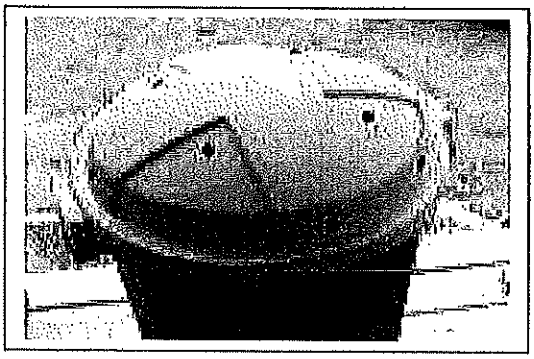


To prevent small rodents from getting into your bin, it's important that your holes are no larger than half inch.

Next, drill holes about 6-inches apart in the bottom of the can. These holes will be used for drainage



To complete the process, drill holes in the lid of the can.



Now you are ready to add your composting materials.