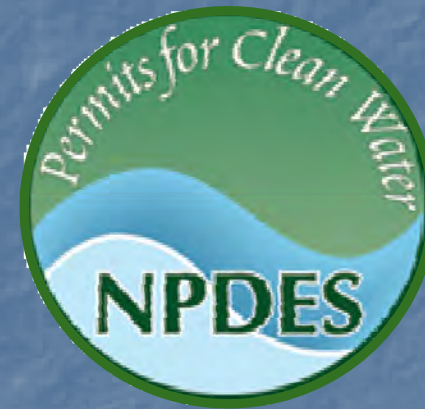


National Pollutant Discharge Elimination System (NPDES)

May 2, 2012

City Council Meeting
7:00 pm



Topics of Discussion

PART 1

■ NPDES Introduction

- What is NPDES?
- Historical Background
- Chronological Summary of Requirements
- 2012 Annual Report Summary
- Identified Deficiencies

PART 2

■ Pollution Prevention

■ Illicit Discharge Identification and Reporting



What is NPDES?



NPDES = National Pollutant Discharge Elimination System

It is a federal permit system for regulating point sources of pollution to surface waters.

Point sources include:

- ✓ industrial facilities
- ✓ municipal governments and other government facilities, and
- ✓ some agricultural facilities, such as animal feedlots.



Point sources may not discharge pollutants to surface waters without a permit from the National Pollutant Discharge Elimination System (NPDES).

Historical Background

The NPDES program was developed by the U.S. Environmental Protection Agency (EPA) in two (2) phases:

- ① Phase I, promulgated in 1990, targeted the following pollutant sources:
 - "Large" and "medium" municipal separate storm sewer systems (MS4s) servicing municipalities with populations of 100,000 or more, and
 - Industrial activity, including large construction activity (5 or more acres of land).
- ② Phase II, promulgated in 1999, targeted additional pollutant sources, including:
 - MS4s not regulated under Phase I; and
 - Small construction activity disturbing between 1 and 5 acres of land.

Historical Background

- In October 2000, EPA authorized the Florida Department of Environmental Protection (FDEP) to implement the NPDES stormwater permitting program in the State of Florida.
- The NPDES program regulates point source discharges of stormwater into surface waters of Florida from certain municipal, industrial and construction activities.
- As the NPDES permitting authority, FDEP promulgates rules and issues permits, manages and reviews permit applications, and performs compliance and enforcement activities.
- **Without coverage under the Generic Permit for Discharge of Stormwater from Phase II Municipal Separate Storm Sewer Systems, the MS4s located within the City of DeBary would not be authorized to discharge stormwater into any surface water of the State.**



Chronological Summary

	Date	Action Taken	Comments
Cycle I	6/1/2004		Notice of Intent for Cycle I and Permit Fee of \$5,325 due before June 1, 2004
	8/12/2004	Phase II Permit - Cycle I was issued	Phase II Permit for Cycle I to expire on 08/11/2009
	8/12/2004 - 8/11/2005	Cycle I - Year I Reporting Period	Annual Report due 2/11/2006
	8/12/2005 - 8/11/2006	Cycle I - Year II Reporting Period	Annual Report due 2/11/2007
	8/12/2006 - 8/11/2007	Cycle I - Year III Reporting Period	Annual Report due 2/11/2008
	8/12/2007 - 8/11/2008	Cycle I - Year IV Reporting Period	Annual Report, Notice of Intent ⁽¹⁾ for Cycle II and Permit Fee of \$7,988 due 2/11/2009. Deadline extended to 03/30/2009 and re-extended to 06/17/2009
	11/15/2007	Cycle I - Year II Annual Report AUDIT	
	8/12/2008 - 8/11/2009	Cycle I - Year V Reporting Period	Annual Report due 2/11/2010
Cycle II	9/14/2009	Phase II Permit - Cycle II was issued	Phase II Permit for Cycle II to expire on 09/13/2014
	9/14/2009 - 9/13/2010	Cycle II - Year I Reporting Period	No Annual Report due
	9/14/2010 - 9/13/2011	Cycle II - Year II Reporting Period	Annual Report due 3/13/2012
	9/14/2011 - 9/13/2012	Cycle II - Year III Reporting Period	No Annual Report due
	9/14/2012 - 9/13/2013	Cycle II - Year IV Reporting Period	Annual Report, Notice of Intent ⁽¹⁾ for Cycle III and Permit Fee of \$7,988 due 3/13/2014
	9/14/2013 - 9/13/2014	Cycle II - Year V Reporting Period	No Annual Report due

2012 NPDES Annual Report



The City of DeBary was responsible for documenting and reporting specifics regarding the following elements within the reporting period from September 2010 to September 2011:

- Webpage dedicated to stormwater management and NPDES related articles on Pollution Prevention and Illicit Discharge Detention and Elimination
- City Newsletter articles containing information on stormwater management
- Educational material for City residents about maintaining, landscaping, and improving stormwater ponds
- Annual Clean Up Day
- Curbside Recycling

2012 Annual Report Summary



- NPDES-related public meetings
- Mapped outfalls discharging into Waters of the State
- Proactive Illicit Discharge Inspection Program
- Hazardous spills that occurred within the City
- Stormwater Pollution Prevention training sessions to existing and new employees
- Educational materials distributed to local businesses identifying the hazards associated with illegal discharge and improper disposal of waste
- Erosion and sediment control practices at active construction sites

2012 NPDES Annual Report



- Construction site stormwater complaints
- Development permits, construction site stormwater plans and development orders
- Construction site inspections regarding erosion, sedimentation, and waste control
- Proper Animal Waste Removal from public walks, recreation areas or private property other than the animal owner's property
- City's Solid Waste code related to the Florida Litter Law
- Stormwater Pond Maintenance
- Storm Sewer Maintenance

2012 NPDES Annual Report



- Proper disposal of solid waste, including construction and demolition debris, at active construction sites
- Training of City employees on municipal operations, pollution prevention, waste management, spill response good housekeeping, outdoor material storage and construction site inspection
- Changes to the City's Code of Ordinances related to non-stormwater discharges into the City's MS4
- Changes to Ordinance Number 02-09 which defines an illicit connection, illicit discharge, and inspection and monitoring for compliance
- Changes to Article II of the City's Land Development Code regarding the Design and Construction Standards (Division 4) and Stormwater Management Standards (Division 5)

2012 NPDES Annual Report


 Reporting
Categories

 City
Deficiencies

Element ID/BMP #		BMP Description	Required Goals	Summary of Results
1a	1	The City currently maintains its own website and has developed a web page devoted to stormwater management and NPDES related activities within the community. The web page includes articles on steps the public can take to reduce stormwater pollution	1. Maintain stormwater NPDES webpage and document the number of "hits" on the web page.	Information is not available.
1a	2	The City distributes newsletters 6 times per year to all City residents. The City includes one article in two of the newsletters on stormwater management practices and NPDES related activities.	1. Distribute newsletters containing one article on stormwater management 2 times per year to all City residents. Document the number of newsletters distributed.	No articles related to NPDES related activities were published.

2012 NPDES Annual Report



Reporting
Categories

City
Deficiencies

Element ID/BMP #		BMP Description	Required Goals	Summary of Results
1a	3	The City has distributed education material about the impacts of stormwater discharge and the steps the public can take to reduce pollutants.	1. Distribute educational material about maintaining, landscaping, and improving stormwater ponds.	Educational materials, such as the "Neighborhood Guide to Stormwater Systems" were distributed to residents during the National Night Out event. 20 pamphlets were distributed.
2a	3	Hold Stormwater Management Program related public meetings	1. Document the number of people in public meetings relating to the Phase II MS4 permit requirements. 2. Document and report the number of public meetings held related to Phase II MS4 permit requirements.	No public meetings related to the MS4 permit requirements have been held during this reporting period.

2012 NPDES Annual Report


 Reporting
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 City
Deficiencies

Element ID/BMP #		BMP Description	Required Goals	Summary of Results
3c	1	The City will implement a program to detect and eliminate illicit discharges and illegal dumping as defined by BMP 2. City personnel will continue proactive inspection efforts to deter and eliminate illicit discharges to all components of the MS4.	<ol style="list-style-type: none"> 1. Document and report the number of proactive illicit discharge inspections performed. 2. Document and report the number of illicit discharges / connections / dumping detected. 3. Document and report the number of illicit discharges / connections / dumping eliminated. 	This program has not been implemented.

2012 NPDES Annual Report


 Reporting
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 City
Deficiencies

Element ID/BMP #		BMP Description	Required Goals	Summary of Results
3d	1	The City has developed a web page devoted to stormwater management and NPDES activities. On this web page, the City posts educational information on their illicit discharge detection and elimination program. City contact points are provided so that citizens can report illicit discharges to the proper authorities.	1. Document the number of visits to the City web page on an annual basis.	Information is not available.

2012 NPDES Annual Report


 Reporting
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 City
Deficiencies

Element ID/BMP #		BMP Description	Required Goals	Summary of Results
3d	3	Educational material is distributed to local businesses identifying the hazards associated with illegal discharge and improper disposal of waste.	1. Document the number of materials distributed to businesses.	137 materials were distributed to businesses during the reporting period.
4e	1	The City currently has its own complaint system in place which is maintained using a database management system. When complaints regarding construction activity are received, the information is entered into the database and City staff investigates and works to resolve the problem. The complaints are organized by category so they can be easily tracked.	1. Document and report the number of construction site stormwater complaints received.	No stormwater complaints were received during the reporting period.

2012 NPDES Annual Report

Reporting
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Deficiencies

- Previously presented permit elements require immediate attention for the City to become compliant with the NPDES Program and avoid any violation notices and potential fines.
- Future FDEP audit to be scheduled for late 2012 / early 2013.
- Presentation of extensive supporting documentation justifying the claims made in the 2012 Annual Report.



- FDEP may request a site visit to a City-owned municipal storage garage / fleet maintenance area or to an active construction site.
 - Barwick Maintenance Facility
 - Bill Keller Park Maintenance Storage Building, Storage Barn, Chemical Shed & Chlorine Building

FDEP Request for Additional Information



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

May 1, 2012

Sent via email

Bob Garcia
City Mayor
City of DeBary
16 Colomba Road
DeBary, FL 32713

Subject: City of DeBary Phase II Municipal Separate Storm Sewer System (MS4)
NPDES Permit ID Number FLR04E120 (Cycle 2)
Year 2 Annual Report Submittal

Dear Mr. Garcia:

Thank you for your submittal of the Year 2 Annual Report of the Stormwater Management Program (SWMP) activities required under the *Generic Permit for Discharge of Stormwater from Phase II Municipal Separate Storm Sewer Systems*. The purpose of this letter is to inform you that the Department's review of your Annual Report indicates that the City of DeBary is not in compliance with the generic permit. Failure to comply with a permit issued by the Department is a violation of Section 403.161(1)(b), Florida Statutes and may lead to penalties of up to \$10,000 per day for each day of violation.

Required Improvements - The following required improvements must be implemented in a timely manner to avoid penalties and to bring your permit into compliance with the requirements in the Generic Permit.

- For BMP 1a-01, ensure the City's stormwater NPDES webpage is able to track the number of visits to the website. If the City is unable to count the number of visits to the stormwater NPDES website, please remove this BMP and replace it with another public education BMP that is measurable and quantifiable. **Failure to implement this measurable goal is unacceptable. It constitutes non-compliance with the approved NOI and may subject the permittee to penalties of up to \$10,000 per day for each day of violation.**
- For BMP 1a-02, ensure the City's newsletter contains articles pertaining to stormwater management. In addition, the City must document and report the number of newsletters distributed in accordance with your approved NOI. **Failure to implement this measurable goal is unacceptable. It constitutes non-compliance with the approved NOI and may subject the permittee to penalties of up to \$10,000 per day for each day of violation.**
- For BMP 3c-01, Pursuant to Part II.C. "Deadline for Development of Stormwater Management Program" of the generic permit, the City is required to develop and implement a plan to eliminate illicit discharges and illegal dumping. In addition, the City is to continue to implementation of this illicit discharge inspection program. The City reported "This program has not been implemented" in the Summary of Results column on the annual report. **Failure to implement this measurable goal is unacceptable. It constitutes non-compliance with the approved NOI and may subject the permittee to penalties of up to \$10,000 per day for each day of violation.**

www.dep.state.fl.us

II MS4, NPDES Permit ID Number FLR04E120 (Cycle 2)
Submittal

01, ensure the City's webpage containing educational material related to the illicit detection and elimination program is able to track the number of visits to the website. If the City is unable to count the number of visits to the webpage related to public education on the hazards associated with illicit discharges and illegal dumping, please remove this BMP and replace it with another public education BMP that is measurable and quantifiable. **Failure to implement this measurable goal is unacceptable. It constitutes non-compliance with the approved NOI and may subject the permittee to penalties of up to \$10,000 per day for each day of violation.**

In order to bring your permit into compliance with the requirements in the Generic Permit, the Department requests that you provide the following required improvements:

01 - Modifications to the web site to allow tracking of the number of web visits or a public education BMP.

02 - A draft or final version of the City's upcoming or most recent newsletter containing at least one article related to stormwater management.

03 - A copy of written standard operating procedures that will be used to implement the Illicit Discharge Inspection and Elimination including a copy of the checklists that are used to document proactive illicit discharge inspections.

04 - Modifications to the web site to allow tracking of the number of web visits or a public education BMP on the hazards associated with illicit discharges and illegal dumping.

I'd like to take this opportunity to remind you that your SWMP is a living document that should be updated as needed to continually improve management of stormwater. This is especially true for the City of DeBary, that discharges to an impaired water body with an ongoing, in preparation for your permit coverage reapplication for Cycle 3, we offer you the opportunity to submit comments and required improvements for your revised SWMP that will be submitted on the next reapplication. Of course, if you determine that changes to your SWMP are necessary before the next reapplication is due, you may submit a separate written request for changes at any time.

When you check the corresponding permit year box at the top of page one of the AR

to determine if any water quality monitoring is occurring in your area (by other agencies, environmental organizations, universities, industries, etc.) and use the monitoring data to help assess the effectiveness of your SWMP.

Comments - The Department recommends that the permittee strongly consider the following comments on your SWMP as you continue to implement these permit requirements during the next reapplication.

03, please move the measurable goal to the BMP description, because it describes a measurable goal that is not quantifiable. Add a new measurable goal to "Document and report the number of educational brochures distributed".

1, please:

- move the first sentence of the measurable goal to the BMP description since it describes a process and is not measurable.

Reporting
Categories

City
Deficiencies

ANY QUESTIONS?



Topics of Discussion

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PART 2

■ Pollution Prevention

■ Illicit Discharge Identification and Reporting

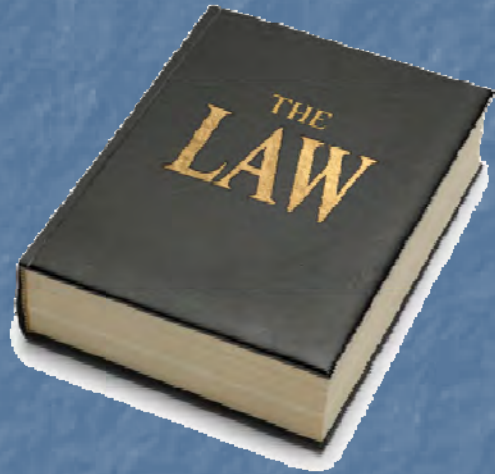


POLLUTION PREVENTION



POLLUTION PREVENTION

The Federal Clean Water Act was established in 1972 to protect our waterways.



This legislation was passed in response to growing public concern for serious and widespread water pollution.

As a result, the National Pollutant Discharge Elimination System (NPDES) was developed, and our nations waterways have shown an increase in quality.

Please participate with the City of DeBary in this work by finding ways that you can help.

POLLUTION PREVENTION

How Can We Protect Our Local Waterways?

- Do not pour household products such as cleansers, beauty products, medicine, auto fluids, paint and lawn care products down the drain.
- Dispose of excess household grease (meat fats, lard, cooking oil, shortening, butter, margarine, etc.) diapers, condoms and personal hygiene products in the garbage can.
- Don't pour used motor oil down the drain. Take it to service stations or to AutoZone.

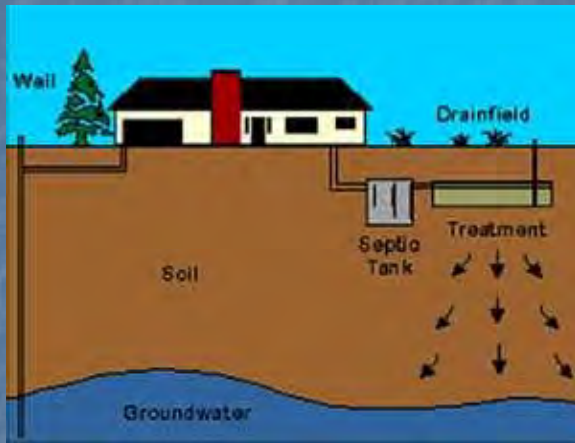


**Not Down
My Drain!**

- | | |
|--------------------------------------------------------|------------------------------------------------------------|
| <input checked="" type="checkbox"/> Cleaners | <input checked="" type="checkbox"/> Grease |
| <input checked="" type="checkbox"/> Beauty Products | <input checked="" type="checkbox"/> Diapers |
| <input checked="" type="checkbox"/> Medicine | <input checked="" type="checkbox"/> Condoms |
| <input checked="" type="checkbox"/> Auto Fluids | <input checked="" type="checkbox"/> Feminine Products |
| <input checked="" type="checkbox"/> Paint | <input checked="" type="checkbox"/> Motor Oil |
| <input checked="" type="checkbox"/> Lawn Care Products | <input checked="" type="checkbox"/> Photographic Chemicals |

POLLUTION PREVENTION

Where Does All the Dirty Water Go?



Whether your house is serviced by a septic tank or a sanitary sewer system, the water that is flushed down the toilet or drained into sinks is treated by a variety of processes to reduce or eliminate pollutants from organic materials, not hazardous chemicals.

These have the potential to eventually end up in local waterways (i.e., rivers and lakes).

POLLUTION PREVENTION

Take Part in Preventing Water Pollution

Did you know that when someone pours, blows, or sweeps anything into the street, it will eventually end up in one of our City's lakes?

Many businesses and individuals discard wastewater, pollution, and debris onto the ground and into the storm drains unaware that these actions may cause lake pollution.



A storm drain is part of the stormwater system that collects rainwater from streets, parking lots and rooftops. In most cases, this polluted runoff drains directly into a lake through the underground storm sewer system.



POLLUTION PREVENTION

Erosion and Sedimentation

Sediment is one of the greatest pollutants by volume entering our lakes and streams and is a product of uncontrolled erosion.

Why control sediment and erosion?

- Erosion and sedimentation result in loss of fertile topsoil, filling of lakes and streams.
- Increased flooding.
- Endangerment to plant and animal life, damage to streets and roads.
- Other pollutants such as pesticides, herbicides, and oil can become attached to eroded soils and enter lakes and streams along with the soil.



POLLUTION PREVENTION

Erosion and Sedimentation

How Can You Help?



- Plant and maintain vegetation on bare and sloped areas.
- Route roof drainage to lawns, paved driveways, or collection barrels.
- Preserve existing vegetation.

These measures will help curb erosion and sedimentation and will maintain the aesthetics and cleanliness of our lakes and streams.

POLLUTION PREVENTION

Leaves and Grass Clippings

Leaves and grass clippings that are able to reach a lake through the storm drain system will decrease the amount of oxygen in the water as they decompose.



Released nutrients can cause excessive algal growth which may result in a fish kill.

PLEASE do not add to the burden by raking or blowing leaves and grass into the street.

POLLUTION PREVENTION

Leaves and Grass Clippings

How Can You Help?

- Start a compost pile for leaves and other yard waste.
- Invest in a mulching blade for your lawn mower.
- If you have a lawn services, please be sure they comply with these guidelines.



Data collected has shown that grass clippings and leaves contain high concentrations of nitrogen and phosphorous which are the most common cause of urban lake pollution.

POLLUTION PREVENTION

Sanitary Sewer Overflows

When grease or oil from restaurants and households is discharged to the sanitary sewer system it mixes with other wastes and becomes solidified. This creates a blockage in sewer pipes, preventing the sewage from flowing and causing it to overflow into streets, buildings, and lakes.

How Can You Help?



- Do Not put greasy food items down the drain or garbage disposal.
- Wipe dishes, pots and pans with a paper towel to remove excess grease before washing.
- Clean grease spills with a rag or paper towel, and place grease in a container to solidify and throw away with the garbage.
- Maintain septic systems regularly.

POLLUTION PREVENTION

Pesticides, Herbicides, & Fertilizers

Unwise or excessive use of chemicals can harm people, pets, beneficial organisms and the environment. Use non-toxic alternatives whenever possible and pull weeds by hand.

Avoid overuse of fertilizers, especially near the water's edge. Rain and lawn watering can wash excess fertilizers into ponds and waterbodies, causing algal blooms and weed growth.



Use pond water to irrigate your lawn. It not only saves drinking water supplies, but also recycles nutrients so that you can fertilize less frequently. You save on both your water and your fertilizer bills.

Use only aquatic herbicides in maintaining stormwater ponds. Land-based herbicides contain nutrients that are harmful to water bodies.

ILLICIT DISCHARGE REPORTING

We Need Your Eyes
on the Streets!



- ☑ Report any pollutant material that you see being discharged into a street, alley, or storm drain.
- ☑ If you see a violation occurring, call the City Safety Coordinator, Mr. Alan Williamson at (386) 668 2040, ext. 323, and provide the location, time, and any other observations you may have witnessed.
- ☑ Violations that are reported while they are in progress can often be corrected quickly and may result in little or no pollution entering a lake.

ANY QUESTIONS?



Presented By:

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