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# Illicit Discharge Detection and Elimination Training

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Prepared for

**Town of Windermere Public Works Department**

Prepared by and Performed by

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**Windermere, Florida**

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Why are you in this training?

- Compliance with Windermere's *National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4)* permit.
- The Town must inspect portions of their MS4 that have a reasonable potential of containing illicit discharges/connections/dumping:
  - Commercial zoned areas/properties within the Town's MS4 contributing area
- PROACTIVE and REACTIVE Inspections

## What is Stormwater Runoff?

- Stormwater Runoff is water created from rain that does not soak into the ground, but flows over ground surface and runs into nearby waterways
- The Town of Windermere's Stormwater System, or MS4, consists of open swales, gutters, storm drains, underground pipes, open retention ponds, culverts, and creeks
- Stormwater is **not treated**, it flows directly into our surface waters

- Stormwater flows UNTREATED into the Butler-Chain-of-Lakes
- Lake Butler is impaired for Nutrients (Total Nitrogen)
- Both Lake Butler and Lake Bessie were previously impaired for Mercury

- Lakes and other waterbodies provide biological functions that benefit not only aquatic life, but human life as well



Why do we care?

## What is an Illicit Discharge?

- Any discharge to an MS4 that is not composed entirely of stormwater
- Illicit discharges fall into 3 categories:
  - Improper disposal/Accidental runoff
  - Deliberate dumping
  - Illicit connections

# Improper Disposal

- Pollutants discarded incorrectly or improperly stored causing unintended discharge
- Residential or Commercial
- Examples include:
  - Paints
  - Petroleum products
  - Fats, oils, and greases
  - Cleaning products
  - Yard debris
  - Fertilizers



# Accidental Runoff

## Examples:

- Commercial auto repair, salvage yards, or carwash water, or pressure cleaning
- Commercial or residential landscaping
  - Pesticides
  - Fertilizers
- Septic tank overflows
- Construction runoff
  - Including sediment





## Deliberate Dumping

- Purposefully disposing of non-stormwater liquids or debris into the MS4 (includes roadside ditches)
- Examples Include:
  - Construction waste
  - Chlorinated pool water discharge
  - Fertilizers and pesticides if application rates and timing of applications are inappropriate
  - Obvious discharges with very high turbidity, strong odors and colors



# Unauthorized/Illicit Connections

- Unauthorized connections to drainage structures such as
  - Pool discharge
  - Sewage
  - Grey water
  - Commercial discharge
- May be noticed during dry weather as well as wet.



# PROACTIVE INSPECTIONS

- For proactive facility inspections, the trained inspector conducts an unannounced visit to the facility.
- A standardized inspection form is used (see right)



## TOWN OF WINDERMERE

### Proactive Illicit Discharge/Illegal Connection Inspection Form

Date of Inspection: \_\_\_\_\_

Address of Facility OR General Description of Area Inspected: \_\_\_\_\_

Identification of MS4 component that could receive discharge from this site/area: \_\_\_\_\_

If Facility inspection, does type of business require an MSGP? Yes  No

If yes, does this facility have one? Yes  No

#### Findings:

Evidence of illicit connections to storm sewer? Yes  No

Evidence of dumping/spills to storm sewer? Yes  No

Evidence of wash water going to storm sewer? Yes  No

Storage tanks leaking or improperly contained? Yes  No

Stockpiles/debris piles uncontained? Yes  No

If "yes," to any above, describe: \_\_\_\_\_

Type of Enforcement Action Taken: \_\_\_\_\_

Date to verify elimination: \_\_\_\_\_

Date of Referral to FDEP of facility that may require Multi-Sector Generic Permit (MSGP): \_\_\_\_\_

## Priority Areas for Inspection

- Areas with older infrastructure;
- Industrial, commercial, or mixed-use areas;
- Areas with history of past illicit discharges and/or illegal dumping;
- Areas with on-site sewage disposal systems;
- Areas upstream of sensitive or impaired water bodies;

## Signs of Illicit Discharge

- Colored, cloudy, and/or iridescent water
- Suds
- Strange Odors (sewage, gas)
- Pipes that shouldn't be there
- Sediment build-up
- Stains
- Empty containers (cans, barrels, etc.)
- Flow noticed during dry weather as well as wet

## Check for Applicable Permits

- Construction Generic Permit (CGP)
- Multi-Sector Generic Permit (MSGP)

## Construction Generic Permit (CGP)

- Required for discharges that:
- Disturb at least one or more acres of land or disturb less than one acre of land but are part of a common plan of development or sale; and
  - Discharge stormwater to surface waters of the state or to surface waters of the state through a MS4.



## Multi-Sector Generic Permit (MSGP)

- Required for activities that could cause pollution to discharge stormwater runoff  
Compliance with the permit requires pollution prevention BMPs



## Priority Area inspections:

- For priority areas, a drive-around procedure is followed:
  - The trained inspector(s) patrols the prioritized area searching for indications of illicit discharges/connections/dumping.
  - If any are identified, the inspector either:
    - stops to do a Facility Inspection,
    - a reactive investigation,
    - or completes a work order form for the appropriate personnel to complete the investigation.



These common discharges are ALLOWED:

- Landscape Irrigation
- Lawn Watering
- Uncontaminated pumped groundwater
- Water line flushing
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Water from crawl space pumps
- Footing drains
- Fleet vehicle washing
- Fire fighting activities
- NPDES permitted sources

# REACTIVE INSPECTIONS

- Reactive inspections follow the same procedure as proactive
- Inspection follows a report/tip
- A standardized inspection form is used (see right)



## TOWN OF WINDERMERE

### Reactive Investigation of Reported Illicit Discharge/Illegal Connection/ Illegal Dumping

Date suspected illicit was reported: \_\_\_\_\_

Date of investigation: \_\_\_\_\_

MS4 potential receiving system: \_\_\_\_\_  
\_\_\_\_\_

If not within MS4, date and to whom referral made: \_\_\_\_\_

Verification of problem: \_\_\_\_\_

Type of discharge/connection/dumping: \_\_\_\_\_  
\_\_\_\_\_

Determined Source: \_\_\_\_\_  
\_\_\_\_\_

Type of enforcement action taken: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date to verify elimination: \_\_\_\_\_

Date of Referral to FDEP of facility that may require Multi-Sector Generic Permit (MSGP):  
\_\_\_\_\_

# What to do if you find an Illicit Discharge

- Record the date and time
- Record the signs of illegal discharge
- Track down and remove the source immediately if possible
- Report it to Public Works

**Contact:**

Tonya Elliott-Moore

Public Works Director; [tmoore@town.windermere.fl.us](mailto:tmoore@town.windermere.fl.us)

\*Oil spills should be reported to the appropriate agency for cleanup

Any Questions?



**Thank you!**

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