

# INAFSM Conference

## MCM3: Illicit Discharge Detection & Elimination

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# **Agenda for IDDE**

- 1. What are IDDE Permit Requirements?**
- 2. What's an Illicit Discharge**
- 3. What are the Requirements**
- 4. Developing your Program & Local Regs**
- 5. Strategies for Implementation**
- 6. Examples & Resources**
- 7. Q&A**



# MS4 Stormwater General Permit – INR040000

## 4.2 SWQMP Illicit Discharge Detection & Elimination MCM

- Develop an **IDDE program** to detect, address & eliminate illicit discharges to the MS4 system
- Develop or update a **local ordinance** that prohibits illicit discharge into the MS4 conveyance

- Develop a **standard operating procedure (SOP)** that provides guidance
- Develop **forms** to insure consistent investigations, inspections, elimination and documentation of the illicit discharge management.

# Forms and Documentation You Will Need

- IDDE Program Review Form
  - Public Complaint Form
  - Illicit Discharge Assessment
  - Outfall Inspection Form
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- Photos should be included with the form
  - Forms can be used electronically or by paper



# MCM 3 – IDDE: What's an Illicit Discharge

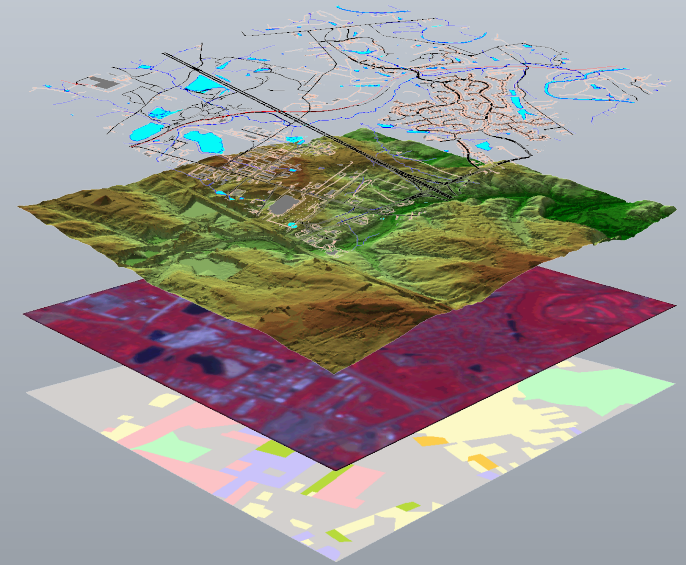
- Any discharge to the system not composed of entirely stormwater with the potential to reach U.S. Waters (creeks, streams, lakes, etc.)
- Illicit Discharge Examples:
  - Sanitary and greywater, mop buckets
  - HHW, oil, grease, paint, cleaners, chemicals
  - Fertilizers, herbicides, pesticides
  - Intentionally dumped or deposited yard waste (i.e. blowing leaves in ditch or grass clippings in gutter)



*If I wouldn't want to drink it or swim in it, it probably shouldn't be in my system*

# MCM 3 – IDDE: Overview

- Adopt IDDE Ordinance
- SOP & Prioritize Areas
- Map your system in GIS
- Screen your system
  - Dry-weather screening
  - Outfalls
- Address calls/concerns from public on dumping
- Educate staff & public
- Document all of it



# MCM 3 – IDDE: Permit Details

4.4.b	Develop a written IDDE plan that at minimum includes 4.4.b.1 to 4.4.b.6 below	1 year	April 13, 2024
4.4.b.1&5	Develop Standard Operating Procedures (SOP), data collection forms, tracking system for dry-weather screening and illicit discharge detection and elimination		
4.4.b.2	Develop schedule to screen all stormwater outfalls that are owned/operated by MS4		
4.4.b.3	Identify and map all active industrial facilities within MS4 area that discharge into MS4 conveyance		
4.4.f	Develop a map that identifies high priority areas for administering the IDDE program - screen these areas more frequently		
4.4.b.4	Participate in hazardous household waste collection activities (promote Solid Waste collection annual events)	Annually	
4.4.b.6	Develop program for public reporting and tracking illicit discharges and spills - hotline & central contact person	1 year	
4.4.d.1	Map outfalls/conveyance system - develop a plan (by April 2024) and map stormwater system on a schedule that will result in 100% to be completed by the end of permit term.	Completed by end of Permit Term	
4.4.h	Conduct dry-weather screening of outfalls to detect and eliminate illicit discharges for 100% of outfalls by end of permit term	Completed by end of Permit Term	
4.4.e	Develop written ordinance to address illicit discharges and establishes legal authority to enforce ordinance	1 year	April 13, 2024
4.4.c	Complete and sign certification form as newly designated MS4.	1 year	April 13, 2024
4.4.g	Develop an annual training program for employees whose normal job responsibilities include investigation of an illicit discharge to stormwater conveyance system	180 days from IDDE certification	October 13, 2024

# MCM 3 – IDDE: Ordinance Development

- Start with the ordinance so you can fix problems while mapping and screening your system
  - Ordinance and SOP need to compliment each other
- Make sure you work with legal so you can inspect and correct problems originating from private properties
- Examples Ordinances:
  - Existing MS4s
  - Purdue LTAP Template
  - IN Stormwater Partnership
- May require partnerships
  - Interlocal agreements
  - Coord. w/ other agencies
- Some allowable discharges

***Stormwater Awareness Week***

**Clean up after your pet.**



**[www.SISWAC.org](http://www.SISWAC.org)**



# MCM 3 – IDDE: Ordinance Development

- Some discharges are allowed; specify in ordinance

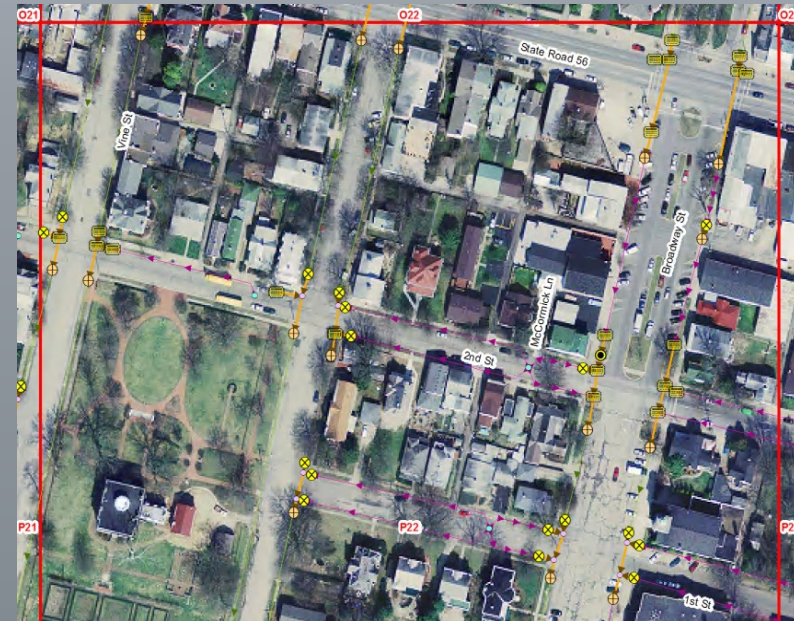
(1) Water line and hydrant flushing for maintenance	(2) Irrigation water
(3) Footing, foundation, and crawl space drains (Uncontaminated)	(4) Excess Storm sewer cleaning water not collected by a vacuum truck (Uncontaminated)
(5) Fire suppression activities	(6) Uncontaminated pumped ground water
(7) Springs	(8) Residential car washing
(9) Non-commercial car washing by community organizations	(10) External building wash down, without detergents
(11) Dechlorinated/debrominated residential swimming pool discharges	(12) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
(13) Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	(14) Uncontaminated condensate from air conditioning units, coolers, and other compressors, and from outside storage of refrigerated gases or liquids

- Considerations:
  - Saltwater pools, clean-ups after fire suppression, auto fluids after crash incidents, carwash fundraisers\*
  - Procedures in place to update ordinance easily

# MCM 3 – IDDE: Mapping Strategies

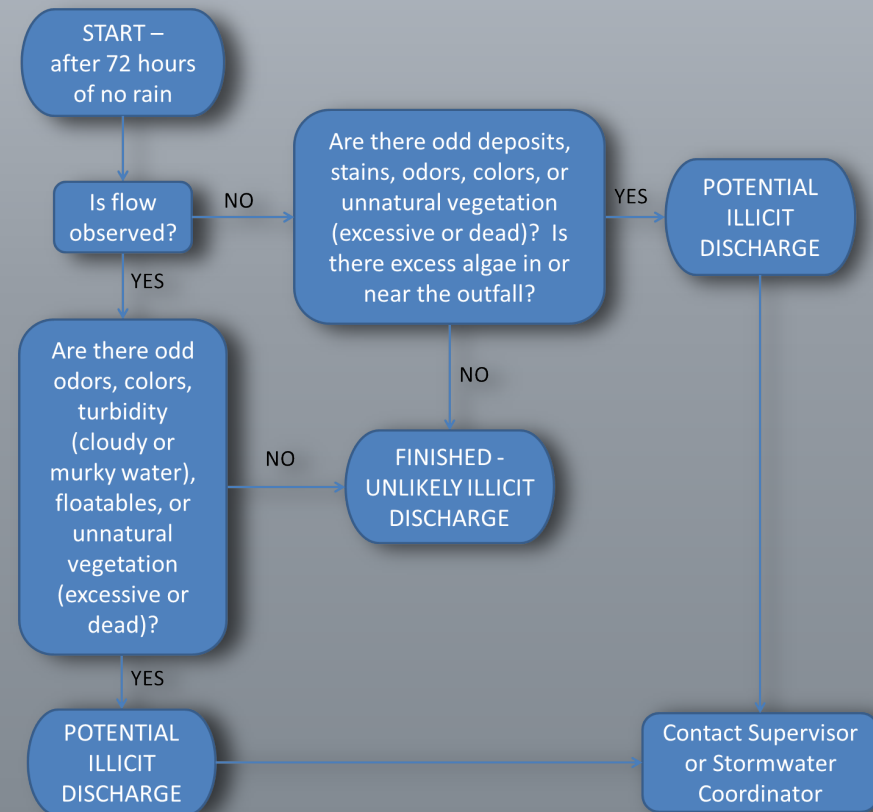
Mapping your system:

- Screen and map your system at the same time
  - Wait 72-hours after rain
- Map in late fall, winter, and spring when visibility is highest
- Use phone or tablet w/ external GPS (GNSS/RTK receiver)
- Information to collect
  - Size, material, shape
  - Condition
  - Maintenance needed?
  - Clogged or evidence of probs.
  - Latitude and Longitude to 1-meter accuracy;
    - Elevation – strongly encouraged



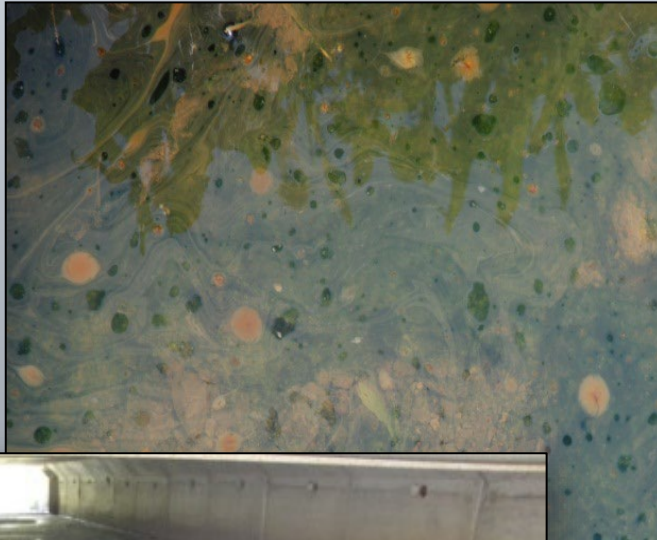
# MCM 3 – IDDE: Dry-Weather Screening

- Flows during dry weather
  - Track to the source for small systems
  - Larger watersheds have baseflow so not always indicates problem
  - Be aware of groundwater natural springs
- Even if no flow, look for evidence of problems
  - Stains, odors, sheen on water surface\*
  - Vegetation, either dead or excessive
  - Outfall scouring?





# MCM 3 – IDDE: Good Examples of Bad





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# MCM 3 – IDDE: Good Examples of Bad





# MCM 3 – IDDE: Good Examples of Bad





# MCM 3 – IDDE: Educating Staff & the Public

- Annual training for staff

## The Public:

- Web content and presence on social media
- Provide recourses and hotline for reporting spills/dumping
- Working with the State; IDEM, INDOT, etc.
- Entities in your jurisdiction
  - i.e. Flood Control Districts, INDOT, etc.

*An ounce of prevention is worth a pound of cure*



**Stormwater Awareness Week**

**If it's on the ground,  
it's in your water.**



[www.SISWAC.org](http://www.SISWAC.org)



# MCM 3 – IDDE: Challenges & Considerations

- Prioritize your efforts
  - Industrial areas, restaurant districts, historic neighborhoods w/ higher potential for cross-connections
- Having a well mapped system helps you respond and recover from spills more effectively
  - Have procedures in place to keep your mapping up to date
  - Public, and if at all possible, private
- Accessing private property
- Your enforcement procedures and abilities
- Know your industrial facilities – location, name, contact info (search “IDEM Rule 6”)
- Countermeasures and clean-up kits:
  - On maintenance vehicles
  - Coord. w/ fire department
- System mapping is an opportunity...
  - Structural condition, elevation data, etc.



# MCM 3 – IDDE: Challenges & Considerations

- Be ready to contact Health Department and State Spill Response
  - Certain spills/quantities must be reported to the state; any spill that creates a sheen on a waterbody
- Be prepared to work with the State – IDEM, INDOT, etc.
- Know the entities in your jurisdiction
  - i.e. Flood Control Districts, INDOT, etc.
- Outlet versus Outfall – Know the difference
- Documentation & organization are key
- The good, the bad, and the ugly – Summarize it all in the annual report
- Continuously evaluate and enhance your Program
- 97% of illicit discharges can be addressed with education and outside of enforcement



# MCM 3 – IDDE: Conclusions

- Know due dates for IDEM submittals, ordinances, etc.
- Education: Public, staff, elected officials
- Be proactive and realistic
  - Mapping is a massive effort so allocate the resources and position yourself for success
- Be prepared to work with IDEM
  - If a spill happens, reach out
  - If a deadline is slipping, own it



## **Track and Document:**

*If you didn't write it down, it didn't happen!*





# Discussion and Questions



# 2023 INAFSM

## Illicit Discharge Detection & Elimination

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# SWAC Materials & Publications



Water Quality And Construction Site Brochures



Illicit Discharge Guide For Municipal Employees



Illicit Discharge Detection And Elimination Standard Operating Procedures (SOP)



Pollution Prevention Municipal Training Resources



Best Management Practices (BMP) Manual



Detention Basin Guidebook



Erosion Prevention And Sediment Control (Shirt Pocket Field Guide)



Other Stormwater Resources

- Made freely available to others for customization and use*