

IDDE Program Self-Assessment Center for Watershed Protection, Inc. 2012

Purpose:

One of the main challenges for an Illicit Discharge Detection & Elimination (IDDE) program is to assess the program's existing status and map out a future course and program direction. This assessment is designed to assist program managers with this task. The desired outcome for conducting this self-assessment is to generate short-term and long-term action items to build a more effective program.

How the Program Assessment is Structured

The structure of the assessment builds upon Chapter 3, Auditing Existing Resources and Programs, in *IDDE: A Guidance Manual for Program Development and Technical Assessments* (<http://cfpub1.epa.gov/npdes/stormwater/idde.cfm>).

The assessment recognizes that each program is in a different stage of development and will evolve and become more sophisticated through time. The questions in each section of the assessment are divided into three subgroups, as follows:

- **Group A (Initiating the Program):** These assessment questions are most relevant for relatively new programs that are just putting program elements in place. It is strongly recommended that each program strive to accomplish the program elements in Group A by the end of an early NPDES MS4 permit cycle. If your program accomplishes all of the objectives in Group A -- Congratulations. . .and keep going!
- **Group B (Enhancing the Program):** These assessment questions represent important program enhancements that are necessary for an effective program. All existing programs should evaluate these carefully to determine which are most relevant for local conditions, and strive to incorporate selected elements within subsequent permit cycles.
- **Group C (Advancing the Program):** These questions refer to program elements that can be added as a program develops its funding, staffing, and planning capabilities. The timing for implementation of selected elements varies for each program.

Completing the assessment involves answering the questions for Groups A, B, and C, and identifying specific action items, as appropriate, from each group. Action items from Group A will be priorities for the short-term since these elements are recommended to be established by the end of the current permit cycle. The three groups are not meant to be static. Each program has unique opportunities and conditions, and accordingly, each program will be able to check off items in each of the three groups. For instance, programs operated by a city public works department will look very different than a county program consisting of multiple townships.

How to Complete the Assessment

For many programs, completing the assessment will require involving several staff from different departments. Ideally, the assessment can be completed by a stormwater manager with overall program responsibilities. However, the assessment can also be

used by city or town managers, planning or public works directors and staff, and consultants working on behalf of local programs.

For each section, the assessment involves the following steps:

1. First, characterize your jurisdiction's infrastructure, water resources and monitoring in the "Gathering Basic Information" section on Page 1. This information can provide a snapshot of features that might influence the type and extent of your IDDE program.
2. For Groups A, B, and C, go through each statement and check off the appropriate box according to whether the element is part of your existing IDDE program.
3. Review the items for which you have checked the "NO" box. Consider which of these you would recommend for short-term and long-term actions. For items checked as "NO" in Group A, develop short-term action items and list these under the "Action Items for Next 1 – 5 Years" at the end of each section. For items checked as "NO" in Groups B and C, evaluate their relevance to your program, and create short or long term action items for the selected elements. Long-term action items should be listed in the "Action Items for Next 5 – 10 Years" section.
4. For any item that is checked as "Don't Know," make identifying the status of that program element a priority action item for Year 1.
5. This exercise may best be done with the help of a small internal staff committee. Please note that you are not committing to these actions, but only developing a draft list to inform your program planning and budgeting. For this reason, you may want to list your action items in priority order.
6. Since permitted IDDE programs must report on "measurable goals," it is also important to develop or clarify your measurable goals for each section. Measurable goals should be related to the short and long-term action items that you have identified. Additional guidance of measurable goals can be found in Chapter 10 of the IDDE Manual. In the self-assessment, a table is provided below the Action Items in each section with some suggestions for measurable goals. The intention is that you will modify these and add others to suit your program.
7. Once you have developed action items and measurable goals, you can use this information to communicate with other departments or decision-makers, help develop your IDDE funding and budgeting plan, and develop goals for your permit renewal documents.

IDDE Program Self Assessment

Gathering Basic Information

The first portion of the self assessment focuses on gathering basic information about the community's infrastructure and general water quality concerns.

Infrastructure Profile			
What is the total area of the jurisdiction?	_____ acres		
What is the total area regulated under the MS4?	_____ acres		
How many miles of streams exist in the jurisdiction?		GIS available? <input type="checkbox"/>	
How many miles of streams exist in the MS4 area?		GIS available? <input type="checkbox"/>	
How many miles of storm drains exist in the jurisdiction?		GIS available? <input type="checkbox"/>	
How many miles of storm drains exist in the MS4 area?		GIS available? <input type="checkbox"/>	
What total area is serviced by storm drains?		GIS available? <input type="checkbox"/>	
What is the general age and condition of the infrastructure?		GIS available? <input type="checkbox"/>	
How many storm drain outfalls exist in the jurisdiction?		GIS available? <input type="checkbox"/>	
How many storm drain outfalls exist in the MS4?		GIS available? <input type="checkbox"/>	
What total area is serviced by sanitary sewers in the jurisdiction?		GIS available? <input type="checkbox"/>	
What total area is serviced by sanitary sewers in the MS4 area?		GIS available? <input type="checkbox"/>	
What total area is serviced by septic systems in the jurisdiction?		GIS available? <input type="checkbox"/>	
What total area is serviced by septic systems in the MS4 area?		GIS available? <input type="checkbox"/>	
What total area is serviced by a combined sewer system?		GIS available? <input type="checkbox"/>	
What total area is serviced with water lines carrying treated drinking water in the jurisdiction?		GIS available? <input type="checkbox"/>	
What total area is serviced with water lines carrying treated drinking water in the MS4 area?		GIS available? <input type="checkbox"/>	
What total area is serviced by wells in the jurisdiction?		GIS available? <input type="checkbox"/>	
What total area is serviced by wells in the MS4 area?		GIS available? <input type="checkbox"/>	
Land Use – in the jurisdiction			
% Urban		% Industrial	
% Residential		% Institutional	
% Commercial		% Agricultural	
% Other: _____			
Land Use – in the MS4 area			
% Urban		% Industrial	
% Residential		% Institutional	
% Commercial		% Agricultural	
% Other: _____			
Water			

Identified stream impairments in the jurisdiction:	<input type="checkbox"/> Bacteria <input type="checkbox"/> Nitrogen <input type="checkbox"/> Phosphorus <input type="checkbox"/> Biochemical Oxygen Demand <input type="checkbox"/> Sediment <input type="checkbox"/> Heavy Metals <input type="checkbox"/> Pesticides / Herbicides <input type="checkbox"/> Other: _____
Is the community influenced by the tide?	
If so, is it freshwater or saltwater?	
What is the average or range of depth to groundwater?	
Monitoring	
Does the municipality fluoridate its water?	
Is dry weather outfall water quality testing a permit requirement (as opposed to visual inspections)?	
If so, what parameters are required for monitoring under the permit?	<input type="checkbox"/> Ammonia <input type="checkbox"/> Cooper <input type="checkbox"/> pH <input type="checkbox"/> Phenols <input type="checkbox"/> Temperature <input type="checkbox"/> Chlorine <input type="checkbox"/> Fluoride <input type="checkbox"/> Detergents <input type="checkbox"/> Potassium <input type="checkbox"/> Bacteria <input type="checkbox"/> Other: _____
Programmatic	
Type of Permit	<input type="checkbox"/> Phase I <input type="checkbox"/> Phase II <input type="checkbox"/> CSO <input type="checkbox"/> None
Would you describe the current IDDE program more Proactive or Reactive?	<input type="checkbox"/> Proactive <input type="checkbox"/> Reactive
Is the sanitary authority part of the jurisdiction rather than a separate entity?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
How many illicit discharges were detected in the last permit cycle?	
How many illicit discharges were successfully tracked to the source in the last permit cycle?	
How many illicit discharges were successfully fixed in the last permit cycle?	
How many full time employees are dedicated to the IDDE program?	<input type="checkbox"/> 0 <input type="checkbox"/> less than 0.5 of an FTE <input type="checkbox"/> 0.5-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> >4

Legal Authority & Coordination (LAC)

GROUP A – Initiating the Program

LAC.A.1. Does an illicit discharge ordinance exist?

☐ Yes ☐ No ☐ Don't know

LAC.A.2. Are there other codes and ordinances with potential links to IDDE (check all that apply)?

- ☐ Fire codes
- ☐ Hazardous waste / spill controls
- ☐ Health codes
- ☐ Industrial stormwater compliance
- ☐ Litter control regulations
- ☐ Nuisance ordinances
- ☐ Plumbing codes
- ☐ Pollution prevention/Good housekeeping (minimum control measure #6)
- ☐ Construction General Permit
- ☐ Restaurant grease regulations
- ☐ Septic system regulations
- ☐ Sewer / drain ordinances
- ☐ Stormwater ordinance
- ☐ Street / highway codes
- ☐ Other:

LAC.A.3. Is there an existing internal system for tracking and reporting illicit discharge investigation status?

☐ Yes ☐ No ☐ Don't know

LAC.A.4. Is the municipality involved with industrial storm water NPDES permit activities or wastewater pre-treatment programs?

☐ Yes ☐ No ☐ Don't know ☐ N/a

LAC.A.5. Does the municipality have clear authority to identify parties responsible for fixing illicit discharges?

☐ Yes ☐ No ☐ Don't know

GROUP B – Enhancing the Program

LAC.B.1. Does effective inter-departmental coordination and cooperation currently occur (e.g. between stormwater and sanitary departments or stormwater and housing departments)?

☐ Yes ☐ No ☐ Don't know

LAC.B.2. Do staff have private property right-of-entry privileges?

☐ Yes ☐ No ☐ Don't know

LAC.B.3. Does the stormwater department have access to information about future planned infrastructure upgrades (e.g. sewer line extensions or replacements) so that improvements/impairments to water quality can be monitored?

☐ Yes ☐ No ☐ Don't know

GROUP C – Advancing the Program

LAC.C.1. Does regional collaboration with nearby jurisdictions regarding ordinance language and legal authority exist (i.e., to maintain consistency between jurisdictions that cross watershed boundaries)?

☐ Yes ☐ No ☐ Don't know
☐ N/A

LAC.C.2. Is an up-to-date shared tracking system in place for all agencies involved?

☐Yes ☐No ☐Don't know

Mapping Resources (MR)

GROUP A – Initiating The Program

MA.A.1. Does the stormwater department have or have access to GIS?

☐Yes ☐No ☐Don't know

MA.A.2. Does current GIS data exist for accurate locations of sanitary and storm sewer networks?

☐Yes ☐No ☐Don't know

MA.A.3. Is there a centralized location for these data?

☐Yes ☐No ☐Don't know

MA.A.4. Are digital and hardcopy versions of mapping data readily available?

☐Yes ☐No ☐Don't know

MA.A.5. Are NPDES permittees in the jurisdiction mapped?

☐Yes ☐No ☐Don't know

MA.A.6. Have the streams in the MS4 been walked and outfalls catalogued?

☐Yes ☐No ☐Don't know

GROUP B – Enhancing the Program

MA.B.1. If watersheds extend beyond the community's boundaries, are GIS data available for neighboring jurisdictions?

☐Yes ☐No ☐Don't know

MA.B.2. Are handheld GPS devices available to IDDE staff?

☐Yes ☐No ☐Don't know

MA.B.3. Are sewer and stormwater GIS mapping layers regularly updated?

☐Yes ☐No ☐Don't know

GROUP C – Advancing the Program

MA.C.1. Are standard operating procedures in place for updating GIS mapping layers?

☐Yes ☐No ☐Don't know

MA.C.2. Are stormwater and sanitary pipe elevations mapped in the GIS?

☐Yes ☐No ☐Don't know

MA.C.3. Are portable GIS notepads available to IDDE staff for use in the field?

☐Yes ☐No ☐Don't know

MA.C.4. Are stormwater hotspots (generating sites) in the jurisdiction mapped?

☐Yes ☐No ☐Don't know

MA.C.5. Are septic systems in the jurisdiction mapped?

☐Yes ☐No ☐Don't know

MA.C.4. Has a GIS-based desktop assessment for illicit discharge potential been completed for the jurisdiction?

☐Yes ☐No ☐Don't know

Staff Capacity (SC)

GROUP A – Initiating the Program

SC.A.1. Who completes outfall field screening for the jurisdiction?	<input type="checkbox"/> Jurisdiction staff <input type="checkbox"/> Consultants <input type="checkbox"/> Interns <input type="checkbox"/> Watershed/Civic Groups or Volunteers <input type="checkbox"/> Other _____
SC.A.2. Who completes illicit discharge investigations (pollution tracking efforts) for the jurisdiction?	<input type="checkbox"/> Jurisdiction staff <input type="checkbox"/> Consultants <input type="checkbox"/> Other _____
SC.A.3. Who completes laboratory analysis for the IDDE program?	<input type="checkbox"/> Our department <input type="checkbox"/> Separate department <input type="checkbox"/> Analytical laboratory <input type="checkbox"/> Local university or institution <input type="checkbox"/> Local water or sewer district <input type="checkbox"/> Other: _____
SC.A.4. Are IDDE staff trained in field safety procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
SC.A.5. Are IDDE staff trained in lab safety procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

GROUP B – Enhancing the Program

SC.B.1. Do IDDE program staff have experience with any of the following (check all that apply)?	<input type="checkbox"/> Water quality monitoring <input type="checkbox"/> GIS <input type="checkbox"/> Leading field crews <input type="checkbox"/> Using field screening kits/equipment <input type="checkbox"/> Laboratory procedures
SC.B.2. Are there protocols in place for staff from other departments to report potential illicit discharges?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
SC.B.3. Do IDDE staff have confined space entry training?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
SC.B.4. Are IDDE staff experienced in dye, smoke or video testing?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

GROUP C – Advancing the Program

SC.C.1. Do watershed groups assist with IDDE efforts such as outfall screening?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
SC.C.2. Are staff from other departments cross- trained to identify potential illicit discharges in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
SC.C.3. Do IDDE staff have the capability to conduct more sophisticated special studies (e.g. pollution loading for certain types of illicit discharges)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know

Internal Tracking and Procedures (ITP)

GROUP A – Initiating the Program

ITP.A.1. Is an outfall tracking system in place (e.g. internal database for tracking illicit discharge status)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
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GROUP B – Enhancing the Program

ITP.B.1. Are quality control procedures in place for data collection and analysis?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
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GROUP C – Advancing the Program

ITP.C.1. Are standard operating procedures in place for detecting and eliminating illicit discharges?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
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Equipment (Equ.)

GROUP A – Initiating the Program

Equ.A.1. Are basic field supplies (e.g. measuring tapes, backpacks, etc.) already owned by the stormwater department and available for use?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Equ.A.2. Is water monitoring equipment (e.g. test kits, probes, handheld meters, etc.) owned by the stormwater department and available for use?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

GROUP B – Enhancing the Program

Equ.B.1. Does the municipality have, or have access to, smoke testing equipment?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Equ.B.2. Are safety and hazardous waste disposal procedures in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

GROUP C – Advancing the Program

Equ.C.1. Does the municipality have, or have access to, a sewer camera?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Equ.C.2. Does the municipality have, or have access to, specialized monitoring equipment (e.g. pygmy meter, velocity meter, dye injection equipment)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

Education and Outreach Resources (EOR)

GROUP A – Initiating the Program

EOR.A.1. Does the jurisdiction post relevant outreach materials on an Internet website?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
EOR.A.2. Does the IDDE program make use of regular community events to spread the message about illicit discharge prevention and elimination?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
EOR.A.3. Do outreach materials on illicit discharges already exist?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
EOR.A.4. Does the community promote environmentally safe residential car washing products and practices?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
EOR.A.5. Does the community provide outreach materials regarding the proper discharge of swimming pool water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

GROUP B – Enhancing the Program

EOR.B.1. Are mechanisms in place to communicate between various agencies in the community, such as public works departments, fire and rescue, building officials, and commercial property owners? ☐Yes ☐No ☐Don't know

EOR.B.2. Does the community have a Fats, Oils and Grease (FOG) program to reduce the potential for sanitary sewer overflows through the education of businesses and residents? ☐Yes ☐No ☐Don't know

EOR.B.3. Are other groups like parks or watershed groups conducting stormwater education or outreach in the community? ☐Yes ☐No ☐Don't know

EOR.B.4. Does the community have an illicit discharge reporting tool that the public can use to report water quality problems (e.g., hotline)? ☐Yes ☐No ☐Don't know

GROUP C – Advancing the Program

EOR.C.1. Are real-time reporting tools (e.g. smartphone apps) available for the public to use to report water quality problems? ☐Yes ☐No ☐Don't know

EOR.C.2. Does the community use multi-media and / or social media to conduct outreach? ☐Yes ☐No ☐Don't know

Discharge Removal Capability (DRC)

GROUP A – Initiating the Program

DRC.A.1. Who currently responds to spills, overflows and hazardous material emergencies? ☐ Fire Department
☐ Public Works Department
☐ Hazmat response team
☐ Contractor
☐ Other: _____

GROUP B – Enhancing the Program

DRC.A.2. Is there a response time commitment to known and reported problems? ☐Yes ☐No ☐Don't know

GROUP C – Advancing the Program

DRC.B.3. Are jurisdiction staff properly equipped and trained to repair common types of illicit connections or are contractors on call to perform this service? ☐ Jurisdiction staff
☐ Contractors
☐ None
☐ Other: _____

Program Budget and Financing (PBF)

GROUP A – Initiating the Program

PBF.A.1. How is the IDDE program addressed for budgeting purposes? ☐ Dedicated line item for IDDE
☐ Part of overall MS4 budget, but not specific IDDE budget
☐ No defined budget

	<input type="checkbox"/> Don't know
	<input type="checkbox"/> Other: _____

PBF.A.2. Is the annual budget for the IDDE program sufficient to achieve permit requirements?

☐ Yes ☐ No ☐ Don't know

GROUP B – Enhancing the Program

PBF.B.1. Are there cost-share arrangements/opportunities available with other departments?

☐ Yes ☐ No ☐ Don't know

PBF.B.2. Are there cost-share arrangements/opportunities available to address illicit discharges in low income areas?

☐ Yes ☐ No ☐ Don't know

PBF.B.3. Does the annual IDDE budget allow for program enhancements such as purchase of better water testing equipment or staff training on latest IDDE methods?

☐ Yes ☐ No ☐ Don't know

GROUP C – Advancing the Program

PBF.C.1. Have grants been awarded to the jurisdiction for special studies associated with watershed restoration?

☐ Yes ☐ No ☐ Don't know

Pollution Prevention (PP)

GROUP A – Initiating the Program

PP.A.1. Are storm drains stenciled in the jurisdiction?

☐ Yes ☐ No ☐ Don't know

PP.A.2. Does the community have oil recycling centers or a directory of oil collection stations?

☐ Yes ☐ No ☐ Don't know

PP.A.3. Does the community host household hazardous waste (HHW) collection days?

☐ Yes ☐ No ☐ Don't know

GROUP B – Enhancing the Program

PP.B.1. Are business outreach plans for common hotspot business operations in place (e.g., gas stations, restaurants)?

☐ Yes ☐ No ☐ Don't know

PP.B.2. Are spill prevention and response plans in place?

☐ Yes ☐ No ☐ Don't know

PP.B.3. Do staff conduct site inspections of NPDES facilities?

☐ Yes ☐ No ☐ Don't know
☐ N/a

PP.B.4. Are jurisdiction-owned/municipal sites practicing good housekeeping measures and have stormwater pollution prevention plans (SWPPPs) in place?

☐ Yes ☐ No ☐ Don't know

PP.B.5. Does the community provide storm drain plug and wet vac provisions for charity car wash events?

☐ Yes ☐ No ☐ Don't know

PP.B.6. Does the community have established HHW facilities at solid waste collection facilities?

☐ Yes ☐ No ☐ Don't know

GROUP C – Advancing the Program

PP.C.1. Has the stormwater department conducted a comprehensive assessment of potential stormwater hotspots (pollution generating sites)?

☐ Yes ☐ No ☐ Don't know

PP.C.2. Does the community provide curbside disposal options for HHW or waive disposal fees at landfills?

☐ Yes ☐ No ☐ Don't know

PP.C.3. Does the community have plumbing code requiring

☐ Yes ☐ No ☐ Don't know

discharge of pool water to the sanitary system and / or fines for unsafe pool discharges?

Goal Setting and Program Evaluation (GSPE)

GROUP A – Initiating the Program

GSPE.A.1. Have IDDE program goals (including measurable goals for the MS4 permit) been established for the community? ☐Yes ☐No ☐Don't know

GROUP B – Enhancing the Program

GSPE.B.1. Are IDDE goals revisited annually or with each permit cycle?

GSPE.B.2. Are individual IDDE program costs accurately tracked (e.g., field, lab, education, enforcement, etc.)? ☐Yes ☐No ☐Don't know

GSPE.B.3. Does the IDDE staff prioritize illicit discharge screening (e.g. based on age of infrastructure, water quality complaints, etc.)? ☐Yes ☐No ☐Don't know

GROUP C – Advancing the Program

GSPE.C.1. Are IDDE program strategies linked to receiving water quality? ☐Yes ☐No ☐Don't know

Action Item Development

Review the list above. For items checked as “No” in Group A, develop short-term action items based on that component and enter it into the list of action items for the next 1 – 5 years. For items checked as “No” in Groups B & C, evaluate their relevance to your program and create short or long-term action items for selected elements. For any item that is checked as “Don’t Know,” make identifying the status of that program element an action item for the following year.

Action Items for Next 1 – 5 Years

1. _____
2. _____
3. _____
4. _____
5. _____

Action Items for Next 5 – 10 Years:

1. _____
2. _____
3. _____
4. _____
5. _____

Measurable Goals

Measurable Goal Examples	Date of Completion
Assign a lead department to coordinate IDDE program	Year 1
Develop maps with relevant infrastructure, land use, and water resources information	Year 2
Prioritize areas or subwatersheds for outfall screening	Year 2
Conduct another Program Self-Assessment	Year 2
Secure a dedicated funding mechanism	Year 5