

Industrial and Commercial Stormwater Sources

Municipal Separate Storm
Sewer Systems of New York City

SPDES Number: NY-0287890
Revised September 30, 2020





NYC Waterfront Industrial Site

NYSDEC requires certain industrial facilities to obtain coverage for stormwater discharges under the State Pollution Discharge Elimination System (SPDES) Multi-Sector General Permit for Stormwater Discharge from Industrial Activities (GP-0-17-004) (MSGP). While NYSDEC will continue to administer the MSGP program, DEP will be responsible for the inspection and enforcement portions of the program at both publicly and privately owned MSGP-covered facilities in the MS4 area. Through the MS4 Industrial and Commercial Stormwater Program (I/C Program), DEP will also assess unpermitted facilities to determine their potential need for SPDES permit coverage.

In accordance with Part IV.H of the MS4 Permit, the City will:

- Prepare and maintain a facility inventory of all publicly and privately owned industrial and commercial sites that could discharge pollutants of concern (POCs) in stormwater to the MS4. The inventory includes unpermitted facilities that will be assessed for SPDES applicability and facilities currently permitted under the NYSDEC MSGP program;
- Develop a plan to assess and inspect unpermitted industrial and commercial facilities to determine if they are significant contributors of POCs to impaired waters
- Develop a program to inspect industrial and commercial facilities that are permitted by the NYSDEC MSGP program;
- Use the approved Enforcement Response Plan per Part III.C of the MS4 Permit for all enforcement actions; and
- Implement a training program for all staff conducting facility inspections.

This chapter describes the I/C Program, which includes the facility inventory, unpermitted and MSGP-permitted facility inspection processes, the database tracking system, and inspection staff training. Chapter 1: Legal Authority and Program Administration discusses the City's rulemaking process and legal authority for the I/C Program. The Enforcement Response Plan in Appendix 1.1 describes DEP's enforcement response protocol for investigating, documenting, and enforcing against unauthorized or potential discharges to the MS4 as well as failure to comply with the facility's Stormwater Pollution Prevention Plan (SWPPP).

The NYSDEC Industrial Stormwater Multi-Sector General Permit

The Clean Water Act provides that stormwater discharges to waters of the United States (including discharges through the MS4) associated with certain industrial or commercial activities are unlawful, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit.

In New York, EPA has approved the state program enacted through the administration of the State Pollutant Discharge Elimination System (SPDES) program. Industrial facilities engaged in certain industrial activities must obtain permit coverage for stormwater discharges to waters of the United States (including through the MS4)

through either an individual industrial SPDES permit or the SPDES Multi-Sector General Permit; or they must provide certification, using the No Exposure Exclusion, that industrial activities are not exposed to stormwater.

- Table 8.1 lists the industrial sectors subject to MSGP permitting.
- Permits are required for discharges from a conveyance that is used for collecting and carrying stormwater, and that is directly related to manufacturing, processing or raw materials storage areas.

Sectors of Industrial/Commercial Facilities Subject to NYSDEC's MSGP

Table 8.1

Sector	Name	Sector	Name
A	Timber Products	Q	Water Transportation
B	Paper and Allied Products	R	Ship and Boat Building or Repairing Yards
C	Chemical and Allied Products	S	Air Transportation
D	Asphalt Paving and Roofing Materials and Lubricants	T	Treatment Works
E	Glass Clay, Cement, Concrete, and Gypsum Products	U	Food and Kindred Products
F	Primary Metals	V	Textile Mills, Apparel, Other Fabric Product Manufacturing
G	Metal Mining (Ore Mining and Dressing)	W	Furniture and Fixtures
H	[Reserved]	X	Printing and Publishing
I	Oil and Gas Extraction and Refining	Y	Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
J	Mineral Mining and Dressing	Z	Leather Tanning and Finishing
K	Hazardous Waste Treatment, Storage, or Disposal Facilities	AA	Fabricated Metal Products
L	Landfills and Land Application Sites	AB	Transportation Equipment, Industrial or Commercial Machinery
M	Automobile Salvage Yards	AC	Electronic, Electrical, Photographic, and Optical Goods
N	Scrap Recycling Facilities		
O	Steam Electric Generating Facilities		
P	Land Transportation		

8.1 Existing Programs

Industrial and commercial facilities citywide are subject to various environmental regulations, including the following DEP programs to inspect certain facilities and enforce relevant regulations.

Industrial Pre-Treatment Program

The Industrial Pre-Treatment Program regulates discharges of specific pollutants from certain facilities into the City's sewer system. This program is implemented citywide covering approximately 300 facilities. In the MS4 area, the City currently inspects 14 facilities to evaluate industrial processes; to ensure compliance with Federal and City wastewater regulations; and to assess outdoor storage, handling, and transferring areas.

Right-to-Know Program

The NYC Community Right-to-Know Law authorizes the DEP Division of Emergency Response and Technical Assessment (DERTA) to regulate the storage, use, and handling of hazardous substances. As part of the enforcement of the Law, DERTA oversees the use and storage of hazardous substances that pose a threat to public health and the environment in NYC. This program manages the reporting and storage of hazardous substances by requiring businesses and facilities throughout the five boroughs to file a report annually detailing the quantity, location, and chemical nature of hazardous substances stored within their facilities.

8.2 Industrial and Commercial Facility Inventory

Using the Historical MS4 Map, various databases and information from NYSDEC, DEP created a facility inventory of all publicly and privately owned industrial and commercial sites that may conduct activities within the industrial

sectors covered by the MSGP permit, and other industrial/commercial facilities that might generate a significant amount of POCs. Table 8.1 lists the industrial sectors.

The Industrial and Commercial Facility Inventory (I/C Facility Inventory) includes the following information:

- General facility information (e.g., name, address, contact information, block and lot, etc.)
- Applicable North American Industry Classification System (NAICS) and Standard Industrial Classification (SIC) codes
- Information regarding products made or services provided at the facility
- Receiving waterbodies and any associated impairments
- Whether the facility generates POCs for which the receiving waterbody is impaired

DEP screened the facilities in the I/C Facility Inventory through a process illustrated in Figure 8.1, and categorized the facilities for DEP action as a result.

Category 1: No Further Action

In accordance with the screening process illustrated in Figure 8.1, DEP classified facilities with one or more of the following characteristics as requiring no further action:

- Improperly reported Standard Industrial Classification (SIC) Codes and not subject to MSGP
- Not draining to the MS4
- Individual SPDES permit coverage
- Notice of Termination (NOT) filed with NYSDEC

These facilities will remain in the I/C Facility Inventory for comparison with future inventory updates. DEP will add to this category unpermitted facilities assessed by DEP (Category 3) and found not to require referral for SPDES coverage or not to be draining to the MS4.

Category 2: Facilities with NYSDEC No Exposure Certification

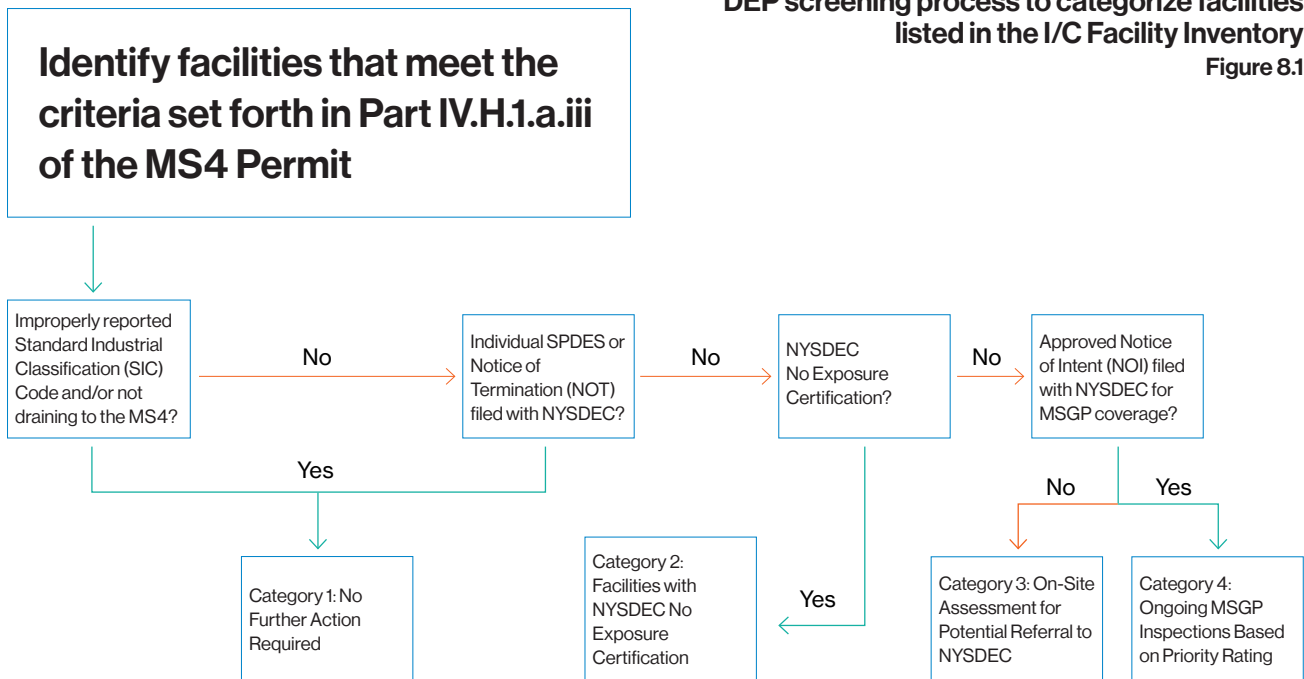
According to the information in the NYSDEC Dropbox,¹ there are currently four facilities in the I/C Facility Inventory with NYSDEC No Exposure Certifications. According to NYSDEC, "No Exposure" means all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snow melt, and/or runoff. DEP will update the I/C Facility Inventory as NYSDEC issues more No Exposure Certifications. Section 8.3 describes how the I/C Program addresses facilities with No Exposure Certifications.

¹ <https://www.dropbox.com/sh/hz3spt98h4d88ue/AADmNLcYxcpZQFeWUNAxGMi9a?dl=0>

Industrial Facility



DEP screening process to categorize facilities listed in the I/C Facility Inventory
Figure 8.1



Category 3: On-Site Assessment for Potential Referral to NYSDEC

Based on the screening process illustrated in Figure 8.1, DEP classified facilities with all of the following characteristics as requiring an on-site initial assessment:

- Meets the criteria set forth in Part IV.H.1.a.iii of the MS4 Permit;
- Discharges stormwater to the MS4;
- Not covered under an existing MSGP or individual SPDES permit; and
- Photographic evidence of industrial and commercial activity.

DEP will perform inspections at these facilities to assess industrial activity exposure to stormwater and to determine whether the facilities generate significant contributions of POCs to impaired waters. If DEP determines that a facility is not a significant contributor, DEP will categorize the facility for no further action (Category 1). If DEP determines that a facility is a significant contributor, then DEP will refer the facility to NYSDEC to determine if SPDES permit coverage is required. After referral, NYSDEC may direct the facility to apply for an individual SPDES permit, or may direct the facility to seek coverage under the MSGP by filing a Notice of Intent (NOI) or a Certificate of No Exposure application. Facilities that receive MSGP coverage will be part of the ongoing inspections under the I/C Program (Category 4). Facilities that receive an individual SPDES

permit will be categorized as no further action (Category 1), as NYSDEC will inspect those facilities. Facilities that receive No Exposure Certification will be in Category 2.

If DEP observes an illicit discharge at the facility site, it will be addressed per Chapter 5: Illicit Discharge Detection and Elimination. Section 8.4 details the assessment process for unpermitted facilities in the I/C Facility Inventory.

Category 4: Ongoing MSGP Inspections Based on Priority Rating

In accordance with the screening process illustrated in Figure 8.1, DEP identified facilities with MSGP coverage. Facilities with MSGP coverage are prioritized into high, medium, and low categories based on their potential for water quality impact. Inspection frequency is based on the priority rating. Section 8.5 details prioritization, inspection frequency, and the inspection process for permitted facilities with MSGP coverage in the I/C Facility Inventory.

The I/C Facility Inventory will be updated as the MS4 Map develops and new information is acquired through on-site assessments. In addition, DEP will update the I/C Facility Inventory every five years after submittal of this Plan using new information from source databases and through NYSDEC coordination. Facilities assessed during this permit cycle as part of Category 3 assessments will not be included in the inventory updates if DEP determines they are not significant contributors of POCs. Further, facilities classified as Category 1 during this permit cycle will not be part of the inventory updates for future Category 3 assessments.

8.3 No Exposure Facility Inspections (Category 2)

There are currently four facilities with a NYSDEC No Exposure Certification in the MS4 area. If DEP receives a public complaint about potential stormwater pollution, and determines that the facility is in Category 2, DEP will conduct an inspection. If DEP determines that the facility is a significant contributor of POCs, it will refer the facility to NYSDEC.

The City currently responds to a variety of public complaints related to industrial activities such as air quality, noise, odor, waste management, and toxins and hazards. As part of the new I/C Program, DEP inspectors may also respond to stormwater pollution complaints at facilities in the I/C Inventory. Refer to Chapter 2: Public Education and Outreach, Section 2.5, for details on how to report illicit discharges or potentially harmful water quality impacts.

8.4 Unpermitted Facility Assessments (Category 3)

Over a five-year period, DEP will assess approximately 1,300 facilities without MSGP coverage listed in the I/C Facility Inventory. The on-site assessments serve three main purposes:

- Confirm the facility is categorized under the proper SIC Code,
- Assess the presence of industrial activities that could contribute significant amount of POCs to stormwater, and
- Determine the level of exposure to stormwater and potential for pollution.

Based on the on-site assessments, DEP will determine whether to refer a facility to NYSDEC. If DEP refers a facility, NYSDEC will then determine whether SPDES permit coverage is required. Figure 8.2 is a summary of DEP's assessment procedures.

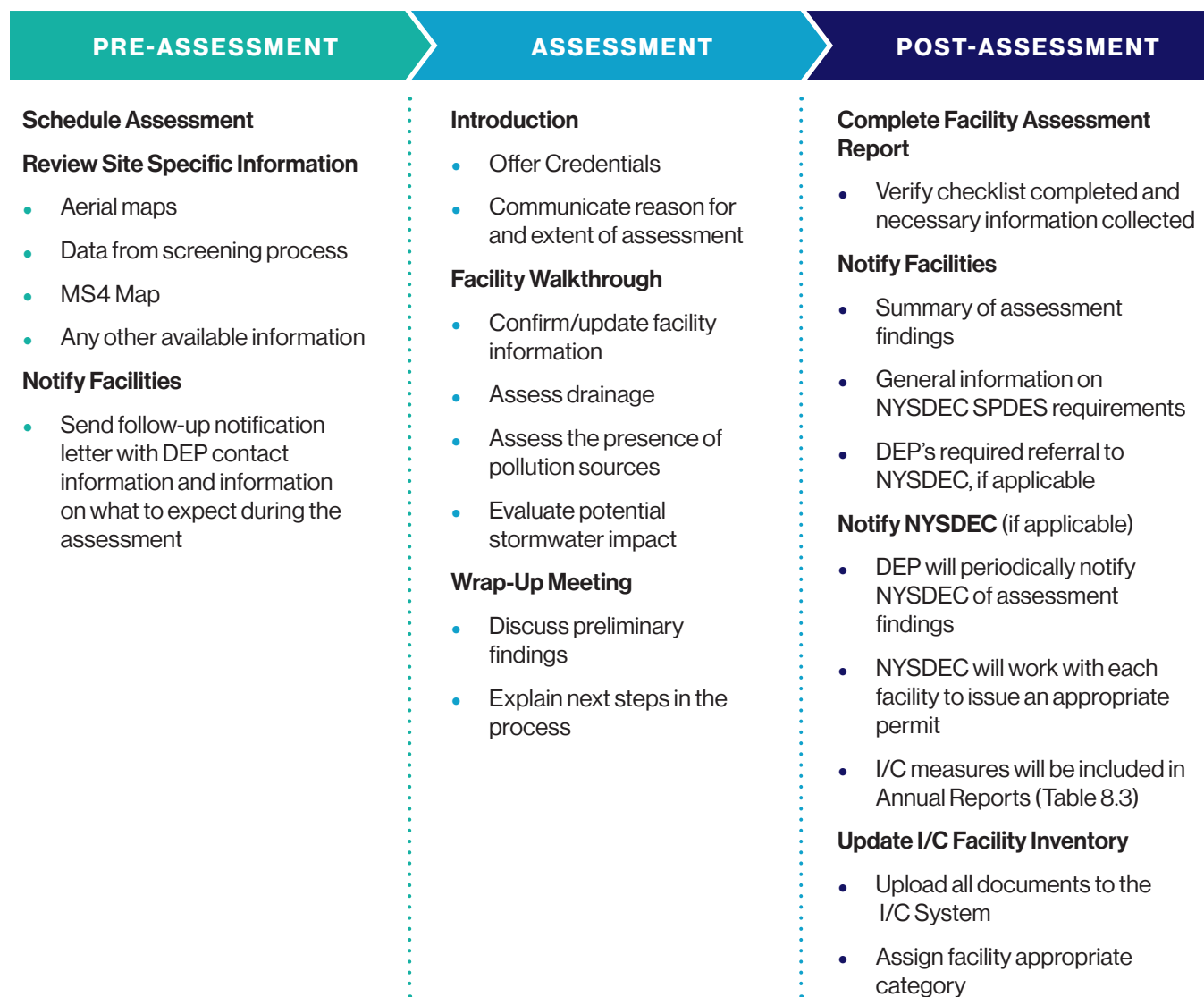
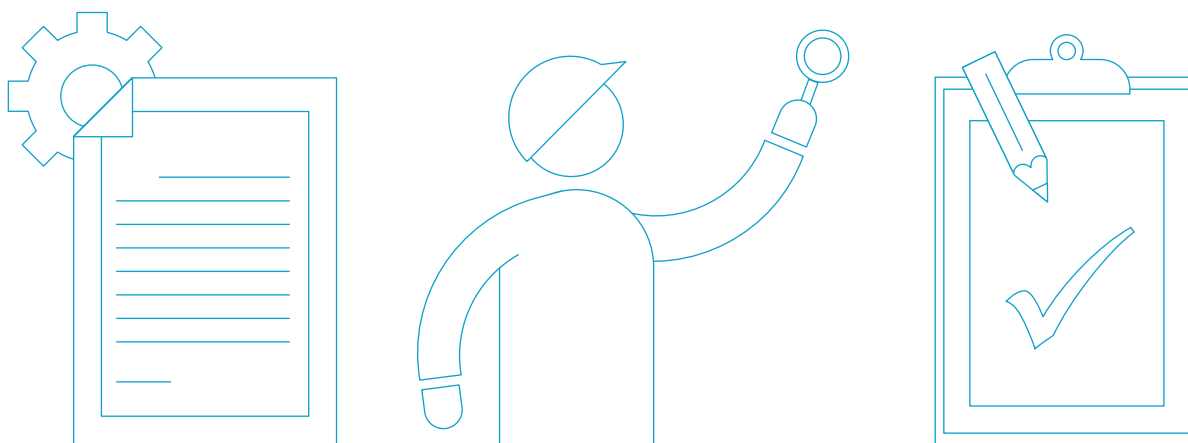
Within three months of submission of this Plan, DEP will send initial notifications to facilities without MSGP coverage in the I/C Facility Inventory that explain the I/C Program and the DEP facility assessment process. DEP will send a follow-up notification closer to the anticipated assessment date. DEP will perform assessments following the Standard Operating Procedures for the Unpermitted Facility Assessments for the I/C Program. DEP developed these procedures to provide a standard protocol for assessing facilities without MSGP coverage in the I/C Facility Inventory, and the procedures will be accessible on the DEP website. DEP expects to begin facility assessments in early 2019; however the exact start date of the assessments is dependent on NYSDEC's approval of this Plan. DEP will encourage the facility manager or owner to participate in the inspection to provide information, answer questions, and learn about permit applicability.

At the end of the assessment, DEP will discuss preliminary findings, identify next steps, answer questions, and provide educational materials. DEP will also describe how to seek SPDES permit coverage from NYSDEC.

After the on-site assessment, DEP will prepare a Facility Assessment Report with information on its findings regarding the facility's stormwater exposure. If DEP determines that the facility is a significant contributor or potential significant contributor of POCs to impaired waters, DEP will refer the facility to NYSDEC and share its Facility Assessment Report with NYSDEC. DEP will also send a follow-up letter to the facility to inform the facility of its referral to NYSDEC, to summarize findings of the assessment, and to share the Facility Assessment Report.

DEP Assessment Process for Unpermitted Facilities in the I/C Facility Inventory

Figure 8.2



8.5 SPDES MSGP Facility Inspections (Category 4)

MSGP-permitted facilities in the I/C Facility Inventory are prioritized through a process to determine the frequency of inspections. Table 8.2 indicates how often DEP will inspect a facility based on its priority rating.

NYSDEC provided an initial priority rating for the currently permitted MSGP facilities for the I/C Program. DEP will inspect these facilities to determine MSGP compliance and will prioritize them for future inspections. Using findings from the inspections to determine the facilities' potential water quality impact, DEP will prioritize the facilities as high, medium, or low priority. DEP will also prioritize newly permitted MSGP facilities based on their potential water quality impact.

The factors contributing to potential water quality impacts include:

- Pollutant sources on site
- Proximity to a waterbody
- Potential for POC discharges or other water quality impacts to impaired waters
- Violation history

Inspection frequency criteria for MSGP facilities
Table 8.2

Priority / Criteria	Inspection Frequency
High Priority	Annual
Medium Priority	Every 3 years
Low Priority	Every 5 years
Failed Previous Inspection	Within one year following previous inspection or as per the conditions in the enforcement action until compliance is achieved

Figure 8.3 summarizes the characteristics of permitted facilities with MSGP coverage that determine its potential water quality impact and priority rating for inspection frequency.

Characteristics of High, Medium, and Low Priority MSGP Facilities

Figure 8.3

High Priority			
Significant exposed sources of pollutants of concern	Adjacent to an impaired waterbody listed in Appendix 2 of the MS4 Permit	Limited control of exposed sources	Repeated major violations
Medium Priority			
Moderate exposed sources of pollutants of concern	Less than 2,000 feet from an impaired waterbody listed in Appendix 2 of the MS4 Permit	Effective control of exposed sources	Occasional minor violations
Low Priority			
Limited exposed sources of pollutants of concern	Greater than 2,000 feet from an impaired waterbody listed in Appendix 2 of the MS4 Permit	Effective control of exposed sources	No violations

Within three months of submission of this Plan, DEP will send a one-time notification to facilities with MSGP coverage in the I/C Facility Inventory that DEP will conduct inspections on behalf of NYSDEC. The inspections include conducting visual observations to identify any unauthorized discharges, illicit connections, and potential discharges of pollutants to stormwater; evaluating the facility's compliance with applicable MSGP requirements; and evaluating the facility's compliance with any other relevant local stormwater requirements. For these inspections, DEP will follow the Standard Operating Procedures for MSGP Inspections for the I/C Program, which will be available on the DEP website. DEP expects to begin facility inspections in early 2019; however the exact start date of the inspections is dependent on NYSDEC's approval of this Plan. DEP encourages the facility manager or owner to participate in the inspection to provide information, answer questions, and learn about permit compliance.

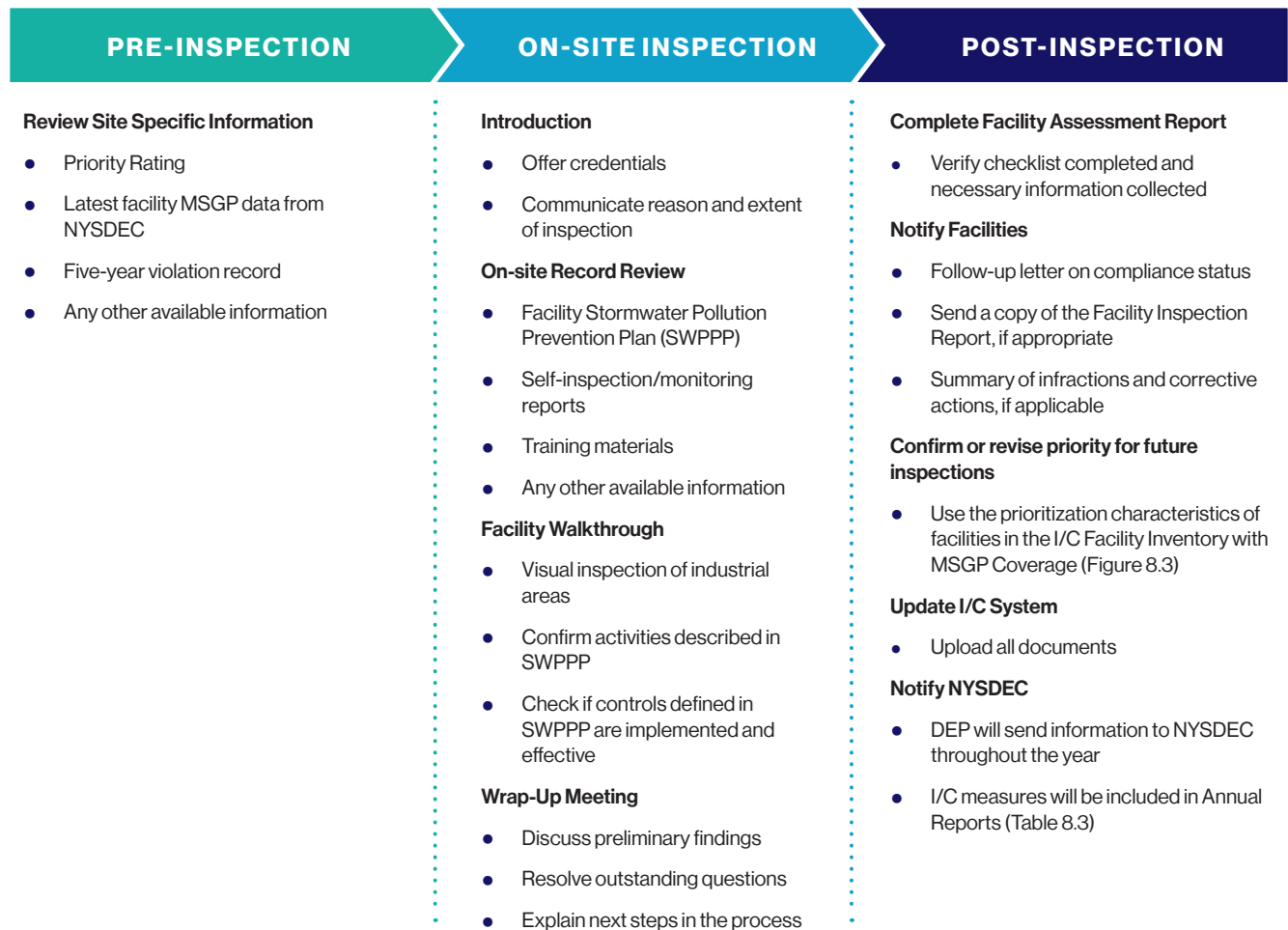
At the end of the inspection, DEP will review preliminary findings, resolve outstanding questions, and explain the next steps to the facility manager or owner. DEP will then complete a Facility Inspection Report, which will

include inspection date and time, name and signature of inspector, weather information, information about any discharge observed or previously observed at the site, any incidents of non-compliance, control measures needing maintenance, failed control measures, and new control measures needed. The facility will receive a follow-up letter on MSGP compliance status; this letter may include a copy or summary of the Facility Inspection Report, information on a follow-up inspection, and/or potential enforcement actions.

Facilities will continue to submit their MSGP annual reports to NYSDEC, and, in addition, will send copies of these submittals to DEP. Details on how to submit the annual reports to DEP will be provided on the DEP website.

DEP may issue verbal warnings, orders, and/or notices of violation (NOVs) with penalties and compliance schedules if a facility is not in compliance with the MSGP. Refer to Appendix 1.1 Enforcement Response Plan for more details. DEP will confirm or revise the facility's potential water quality impact for future inspections after an inspection is completed. Figure 8.4 summarizes the inspection process for permitted facilities with MSGP coverage.

DEP Inspection process for facilities with MSGP coverage listed in the I/C Facility Inventory
Figure 8.4



8.6 Industrial and Commercial Tracking System

DEP developed a database tracking system for the I/C Facility Inventory (I/C System) to store facility information; generate assessment and inspection schedules; schedule assessments and inspections; track assessment and inspection results; store facility enforcement history; and track enforcement actions.

DEP will use the I/C System to schedule assessments and inspections, and to manage responses to public complaints. DEP will store information about each facility in the I/C System and will use that information to create partially pre-filled inspection checklists. DEP will record inspection results and any violations, enforcement actions, and follow up-activities in the I/C System. Based on the inspection results, the system will generate follow-up notifications to DEP for the next inspection.

The City engaged with the business community to raise awareness of the new MS4 Permit requirements and to encourage the business community to engage in the rulemaking process for the I/C Program.

The City completed the following during I/C Program development:

- Created an I/C Program fact sheet for distribution at public meetings and on the DEP website
- Contacted all 1,300 facility owners beginning in June 2017 to invite them to a series of informational meetings in Staten Island, Brooklyn, Queens, and the Bronx to describe the Industrial Commercial Program. The City used the following methods to contact owners:
 - » Letters and mailings
 - » Door-to-door outreach
 - » Phone calls
 - » Social media posts
 - » Notification letters to NYC City Council Members and local Community Boards to enlist their support in notifying facilities

8.7 Inspection Staff Training

DEP will train all staff engaged in the I/C Program on how to properly conduct inspections, prepare reports, and issue violations. Training will continue as the program evolves and staff gains experience. DEP will base training on real case studies and will provide the opportunity for staff to learn from experienced industrial stormwater professionals. Initial training will include the following elements:

- Introduction to EPA's Clean Water Act and industrial stormwater pollution;
- Overview of I/C Facility Inventory development;
- Case studies of industry inspections;
- Field inspection best practices for accessing facilities;
- Field inspection process and checklists;
- Use of the I/C System;
- Site inspections with examples on how to review best management practices (BMPs) ranging from non-structural to structural;
- Requirements of other stormwater general permits or related local requirements;
- Post-inspection procedures and inspection tracking; and
- Enforcement.

Training will also include case studies of successful and inadequate stormwater control measures (SCMs) and considerations for inspecting a broad range of SCMs—from simple to complex. The training will be provided in both classroom and field environments, including having new inspectors shadow more experienced inspectors. Follow up training will be provided every other year to address changes in procedures, techniques, and staffing. DEP will certify that training has been completed by providing a signed training certification to NYSDEC two years after NYSDEC approves the MSGP inspection program, and every other year thereafter.

8.8 Measurable Goals and Program Assessment

Table 8.3 lists measurable goals and measures for identified Industrial and Commercial Stormwater Sources BMPs. Annual Reports will use these measures to detail the status of each measurable goal and BMP. Part IV.M.4.j.i of the MS4 Permit requires an Annual Effectiveness Assessment in each Annual Report, as described in Chapter 12: Recordkeeping and Reporting. The City will base the Annual Effectiveness Assessment on its achievement of the stated measurable goals for each chapter of this Plan, including this program. The City will also refine these measurable goals with information gained from program planning and implementation, interagency working groups, and public input. Continuing to refine and update the measurable goals will allow the City to better quantify and accurately represent the effectiveness of each one.

Summary of BMPs, Measurable Goals, and Measures for the I/C Program

Table 8.3

BMPs	Measurable Goals	Measures
Provide an industrial and commercial pollution control program	Implement an inspection and assessment program for unpermitted industrial and commercial sources	Status of the inspection program and stormwater controls for unpermitted industrial and commercial facilities
	Implement an inspection program for MSGP Permit holders based on priority	Number of SPDES MSGP facilities inspected, by priority
		Number of noncompliant SPDES MSGP facilities
		Number of repeat noncompliant SPDES MSGP facilities
		Number and type of enforcement actions completed and penalties issued