

"A Historic Past"



"A Bright Future"

CITY OF DELAWARE CITY

407 Clinton Street - P.O. Box 4159
Delaware City, Delaware 19706
302-834-4573

April 18, 2019

Department of Special Services, NCC
187-A Old Churchmans Road
New Castle, DE 19720

Attention: Ellie Mortazavi
Stormwater Program Coordinator

RE: Delaware City's Annual Report 2018 NPDES Permit DE 0051071

Dear Ms. Mortazavi:

Enclosed please find the Annual NPDES Permit DE 0051071 Report for the City of Delaware City. At the April 15, 2019 Mayor & Council meeting, the report was presented for Council's review and approved. Hopefully, this helps with your report.

If you need any further information regarding this matter, please contact me at 302-834-4573.

Sincerely,

A handwritten signature in cursive script, appearing to read "David Baylor".

David Baylor
Acting City Manager

Enclosures

**Delaware Department of Natural Resources and Environmental Control National Pollutant
Discharge Elimination System MS 4 Report Form (Phase I and II)**

Information to be completed by permittees and other parties as identified in any existing memoranda of agreement as part of the most current permit.

MS4 Information

City of Delaware City

Name of MS4

David

Name of Contact Person (First)

Baylor

(Last)

Acting City Manager

(Title)

302-834-4573

Telephone (including area code)

david.baylor@cj.state.de.us

Email

407 Clinton Street, P.O. Box 4159

Mailing Address

Delaware City

City

Delaware

State

19706

ZIP Code

What size population does your MS4 serve? 1600

What is the reporting period for this report? (mm/dd/yyyy) From May 1, 2018 to April 30, 2019

Federal NPDES Permit Number: DE 0051071

State NPDES Permit Number: WPCC 3063A/96

1. Public Education and Public Participation

A. Is your public education program targeting specific pollutants and sources of those pollutants? Yes No

B. If yes, what are the specific sources and/or pollutants addressed by your public education program? **Source was Del D.O.T. and New Castle County websites targeting: fertilizers, pesticides, herbicides, pet waste, vehicle fluids, yard waste, litter and debris, cigarette butts, harmful household chemicals, and overall review of reasons for Stormwater Management. 302-STOPPIT has also been published continually. Articles are placed in our bi-monthly newsletter, The City News. (Impressions of approximately 900 per newsletter).**

C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributed to your public education program during this reporting period. **No way of measuring**

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? Yes No

2. Illicit Discharge Detection and Elimination

A. Identify the number of outfalls in your storm sewer system. 12

B. Do you have documented procedures, including frequency for screening outfalls? Yes No

C. How many outfalls were screened for dry weather discharges during this reporting period? 2

D. How many outfalls have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 2

E. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.

20% Annually, by KCI

F. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? Yes No

G. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? Yes No

H. During this reporting period, how many illicit discharges/illegal connections have you discovered? None

Small MS4 Annual Report Form (cont)

I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? N/A

J. How often do municipal employees receive training on the illicit discharge program? Annually

3. Stormwater Management During Construction

A. Other than the state Sediment and Stormwater Regulations, do you have an ordinance or other regulatory mechanism stipulating:

Construction site stormwater requirements X Yes ___ No

Other construction waste control requirements X Yes ___ No

Requirement to submit construction plans (stormwater quality/quantity) for review X Yes ___ No

Re-development X Yes ___ No

Enforcement authority X Yes ___ No

B. Do you have written procedures for:

Reviewing construction plans X Yes ___ No

Performing inspections X Yes ___ No

Responding to violations X Yes ___ No

C. Identify the number of active construction sites ≥ 1 acre in operation in your jurisdiction at any time during the reporting period. Ft. DuPont Site has 3 New Construction Townhouse sites at present. Jurisdiction is through DNREC

D. How many of the sites identified above did you inspect during this reporting period. 0

E. Describe, on average, the frequency with which your program conducts construction site inspections on each site.

Sometimes Daily, but at least weekly

F. Describe, on average, the frequency with which Certified Construction Reviewers (CCRs) conduct site inspections. Weekly

G. Do you prioritize certain construction sites for more frequent inspections? ___ Yes X No

If Yes, based on what criteria? _____

H. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, N/A

___ Yes	Notice of violation	# _____	No Authority	___
___ Yes	Administrative fines	# _____	No Authority	___
___ Yes	Stop Work Orders	# _____	No Authority	___
___ Yes	Civil penalties	# _____	No Authority	___
___ Yes	Criminal actions	# _____	No Authority	___
___ Yes	Administrative orders	# _____	No Authority	___
___ Yes	Other _____	# _____	No Authority	___

I. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? Yes No

J. What are the 3 most common types of violations documented during this reporting period?
N/A

K. What are your criteria for determining which new/re-development stormwater plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.) Projects disturbing greater than 1 acre of land

L. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? Yes No

M. Do these performances or design standards require that pre-development hydrology be met for:

Flow volumes Review Needed Yes No

Peak discharge rates Review Needed Yes No

Discharge frequency Review Needed Yes No

Flow duration Review Needed Yes No

N. How many development and redevelopment plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection? DNREC is handling the Ft. DuPont Subdivision Site

O. How many of the plans identified were approved? The Fort DuPont Subdivision was approved for approximately 90 parcels to be constructed eventually

P. How often do municipal employees receive training on the construction program? Staff attends most workshops or websites that are offered New Castle County, Del DOT, and Chesapeake Stormwater Network

4. Post Construction Stormwater Management

A. Other than the Delaware Sediment and Stormwater Regulations, do you have an ordinance or other regulatory mechanism for long-term operation and maintenance of stormwater management controls? Yes No

B. Have you completed a GIS layer of all outfalls and receiving waters of your storm sewer system? Yes No
currently working with KCI to complete this task

C. Have you completed a GIS layer of all storm drain pipes and other conveyances in the storm sewer system? Will work with KCI to do Yes No

D. How many privately owned permanent stormwater practices/facilities exist within your jurisdiction? 7

E. How many privately owned permanent stormwater management practices/facilities were inspected during the reporting period? 0

F. What percentage of the practices/facilities identified in were found to have inadequate maintenance? 0

G. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections? 15 days of the decision of the Mayor & Council upholding the decision of the City Manager

H. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? Yes No

5. Good Housekeeping

A. Please list facility types in which stormwater pollution prevention plans (or an equivalent plan) have been developed: The Cutting Edge – our Public Works Yard our Sub Contractor Rents from us

B. Are stormwater inspections conducted at these facilities? Yes No

C. If Yes, at what frequency are inspections conducted? Annually

D. List activities for which operating procedures or management practices specific to stormwater management have been developed (e.g., road repairs, catch basin cleaning). The City maintains approximately eight (8) miles of

streets. A contractor for the City performs and records when routine maintenance of existing catch basins and road repairs take place. Typical activities include regular visual inspection and debris removal from catch basins once a month on a rotating basis. DeDOT has maintenance responsibility for SR 9 and Cox Neck Road within the city limits. The streets are cleaned by mechanical sweeper twice a year. In addition, sidewalks and gutters are cleaned from October 15th until the 1st of the year by portable vacuum machine by our contractor on a weekly basis or by store owners. The City's contractor has been keeping a log to document these inspections and maintenance activities. To minimize litter along roadways, trashcans and recycling receptacles are used downtown and in our parks and are regularly emptied by the City. The City also monitors shoulders of roads for litter. Mutt Mitts are provided to the public for dog waste at our parks. We also have snow and ice maintenance logs tracking the salt and calcium used per snow event. Our Contractor only uses Round-Up.

E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? ___ Yes X No

F. If Yes, which activities and/or facilities receive most frequent inspections? _____

G. Do all municipal employees and contractors overseeing planning and implementation of stormwater-related activities receive comprehensive training on stormwater management? NCCD X Yes ___ No

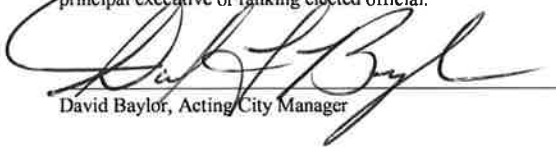
H. If Yes, do you also provide regular updates and refreshers? ___ Yes ___ No

I. If so, how frequently and/or under what circumstances? New Castle Conservation District handles this for us

Certification Statement and Signature

I certify that all information provided in this report is, to the best of my knowledge and belief, true, accurate and complete. X Yes ___ No

Federal regulations require this application to be signed as follows: For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.


David Baylor, Acting City Manager

04/17/19

Date (mm/dd/yy)

2. Illicit Discharge Detection and Elimination

- A. Identify the number of outfalls in your storm sewer system. 12
B. Do you have documented procedures, including frequency, for screening outfalls? [X]Yes []No
C. How many outfalls were screened for dry weather discharges during this reporting period? 3
D. How many outfalls have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 5
E. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type. 20% Annually
F. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? [X]Yes []No
G. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? [X]Yes []No
H. During this reporting period, how many illicit discharges/illegal connections have you discovered? 0
I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 0
J. How often do municipal employees receive training on the illicit discharge program?

3. Stormwater Management During Construction

- A. Other than the state Sediment and Stormwater Regulations, do you have an ordinance or other regulatory mechanism stipulating:
Construction site stormwater requirements [] Yes [] No
Other construction waste control requirements [] Yes [] No
Requirement to submit construction plans (stormwater quality/quantity) for review [] Yes [] No
Re-development [] Yes [] No
Enforcement authority [] Yes [] No
B. Do you have written procedures for:
Reviewing construction plans [] Yes [] No
Performing inspections [] Yes [] No
Responding to violations [] Yes [] No
C. Identify the number of active construction sites >= 1 acre in operation in your jurisdiction at any time during the reporting period.
D. How many of the sites identified above did you inspect during this reporting period?
E. Describe, on average, the frequency with which your program conducts construction site inspections on each site.
F. Describe, on average, the frequency with which Certified Construction Reviewers (CCRs) conduct construction site inspections.
G. Do you prioritize certain construction sites for more frequent inspections? [] Yes [] No



**CITY OF DELAWARE CITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM
ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM
2018 ANNUAL REPORT**

Prepared For

CITY OF DELAWARE CITY



Prepared By

KCI TECHNOLOGIES, INC.
Delaware Water Resources Practice
KCI Project No. 171603872

DECEMBER 2018



**CITY OF DELAWARE CITY
ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM**



2018 ANNUAL REPORT

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Structure Numbers:	
• 0110315786	
• 0110315787	
• 0110315788	



CITY OF DELAWARE CITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM

State Permit No. WPCC 3063A/96
NPDES Permit No. DE 0051071

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM
2018 ANNUAL REPORT

1. INTRODUCTION

As part of the City of Delaware City's National Pollutant Discharge Elimination System (NPDES) Permit requirements, KCI Technologies, Inc. (KCI) was contracted to conduct work in support of the City's Illicit Discharge Detection and Elimination (IDDE) Program.

KCI's responsibilities included performing dry weather outfall field screening of the City-owned Municipal Separate Storm Sewer System (MS4) to identify potential illicit discharges (PIDs), and providing on-call investigations of reports of PID investigations.

The City of Delaware City is a Co-permittee on the Phase I MS4 Permit for New Castle County. The permit requires that 20 percent of the City's MS4 be evaluated annually for illicit discharges. KCI used the City's MS4 Mapping, which includes 12 outfalls, to identify outfalls for dry weather outfall field screening. In 2018, KCI field-screened three outfalls to meet the City's Phase I MS4 Permit requirement. There were no 302STOPPIT Hotline reports. The results of the field investigations are described in more detail below.

2. DRY WEATHER OUTFALL FIELD SCREENING

a. Field Screening Protocol

Dry weather outfall field screening helps to identify potential illicit discharges. If a discharge is determined to be illicit, KCI staff will track the source of the discharge. All outfall field screening is performed by a two-person field team, allowing for the safe and efficient completion of the work. Detailed information regarding outfall field screening protocol and procedures is located in the *Phase I MS4 Permit IDDE Program Standard Operating Procedures* (KCI, 2018).

b. Field Screening Results

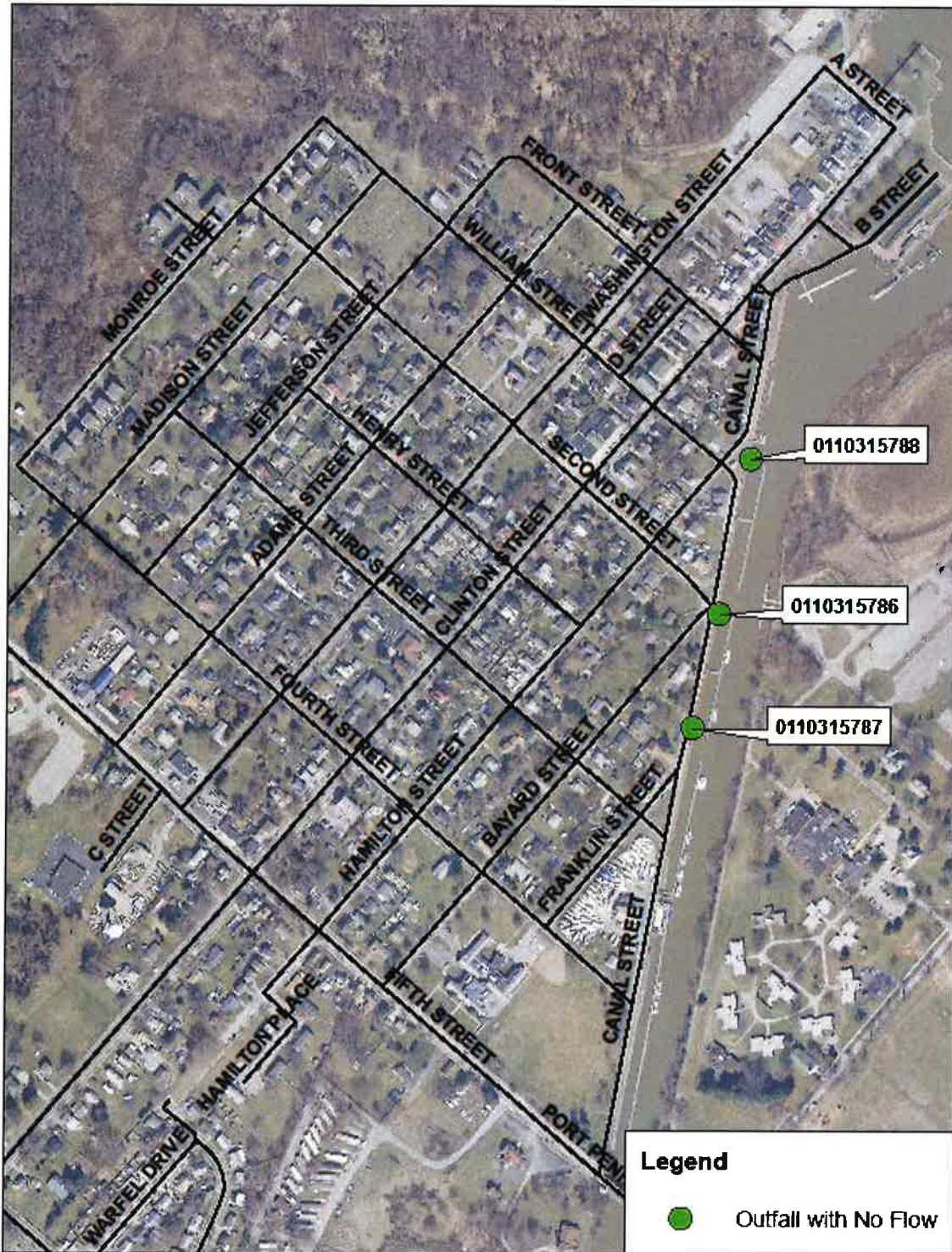
In 2018, KCI field-screened three outfalls for dry weather flow, as listed in **Table 1** and depicted on **Figure 1**. Of the three outfalls field-screened, none had dry weather flow or other signs of illicit discharge (**Table 1**).

Appendix A contains the field data sheets for the three outfalls with no dry weather flow or other signs of illicit discharge.

TABLE 1
2018 DRY WEATHER OUTFALL FIELD SCREENING – INVESTIGATION RESULTS

Structure No.	Investigation Results
0110315786	No flow observed; No evidence of illicit discharge.
0110315787	No flow observed; No evidence of illicit discharge.
0110315788	No flow observed; No evidence of illicit discharge.

FIGURE 1
2018 DRY WEATHER OUTFALL FIELD SCREENING – OUTFALL LOCATIONS





CITY OF DELAWARE CITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM
State Permit No. WPCC 3063A/96
NPDES Permit No. DE 0051071



ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM
2018 ANNUAL REPORT

APPENDIX A

NO FLOW

Structure Numbers:

- 0110315786
- 0110315787
- 0110315788

**ILLICIT DISCHARGE DETECTION & ELIMINATION
FIELD SHEET**

Structure Number: **0110315786**
 Incident ID #: **N/A**
 County: **New Castle**
 Subdivision: **N/A**
 Address/Location **202 Bayard St**

Personnel		MJ, JS
Date		5/8/2018
Time		2:09 PM
Air Temperature (F)		72
Photograph		Yes
Date Last Rain		4/28/2018
Outfall Dimensions (inches)		24
Outfall Shape		Round
Outfall Type		Ductile Iron
Flow Observed		No
Land Use		Residential
Structural Condition		Normal
Erosion (Outfall Area)		None
Algae Growth		No
Vegetative Condition (Outfall Area)		Normal
Flow Rate (cfs)		N/A
Water Temperature (F)		N/A
pH (units)		N/A
Turbidity (ntu)		N/A
Surfactants (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Ammonia (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Potassium (mg/L)	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Odor		None
Deposits/Stains		None
Color		N/A
Floatables		N/A
Determination (From IDDE Flowchart)		No Evidence of Illicit Discharge

**ILLICIT DISCHARGE DETECTION & ELIMINATION
FIELD SHEET**

Structure Number: **0110315787**
 Incident ID #: **N/A**
 County: **New Castle**
 Subdivision: **N/A**
 Address/Location **214 Canal St**

Personnel	MJ, JS	
Date	5/8/2018	
Time	1:53 PM	
Air Temperature (F)	72	
Photograph	Yes	
Date Last Rain	4/28/2018	
Outfall Dimensions (inches)	36	
Outfall Shape	Round	
Outfall Type	Ductile Iron	
Flow Observed	No	
Land Use	Residential	
Structural Condition	Normal	
Erosion (Outfall Area)	None	
Algae Growth	No	
Vegetative Condition (Outfall Area)	Normal	
Flow Rate (cfs)	N/A	
Water Temperature (F)	N/A	
pH (units)	N/A	
Turbidity (ntu)	N/A	
Surfactants (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Ammonia (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Potassium (mg/L)	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Odor	None	
Deposits/Stains	None	
Color	N/A	
Floatables	N/A	
Determination (From IDDE Flowchart)	No Evidence of Illicit Discharge	

**ILLICIT DISCHARGE DETECTION & ELIMINATION
FIELD SHEET**

Structure Number: **0110315788**
 Incident ID #: **N/A**
 County: **New Castle**
 Subdivision: **N/A**
 Address/Location **124 Canal St**

Personnel		MJ, JS
Date		5/8/2018
Time		2:21 PM
Air Temperature (F)		72
Photograph		Yes
Date Last Rain		4/28/2018
Outfall Dimensions (inches)		18
Outfall Shape		Round
Outfall Type		Ductile Iron
Flow Observed		No
Land Use		Residential
Structural Condition		Normal
Erosion (Outfall Area)		None
Algae Growth		No
Vegetative Condition (Outfall Area)		Normal
Flow Rate (cfs)		N/A
Water Temperature (F)		N/A
pH (units)		N/A
Turbidity (ntu)		N/A
Surfactants (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Ammonia (mg/L)	Field Tested:	N/A
	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Potassium (mg/L)	Lab Tested:	N/A
	Follow Up Lab Tested:	N/A
Odor		None
Deposits/Stains		None
Color		N/A
Floatables		N/A
Determination (From IDDE Flowchart)		No Evidence of Illicit Discharge

City of Delaware City

Illicit Discharge Detection and Elimination

Standard Operating Procedures

General

The identification of illicit discharges will occur in one of two manners: identification by the Principal Permittees' contractor or notification by residents or businesses within or immediately adjacent to the City of Delaware City. When illicit discharges are reported by a resident or a business, the City will provide the relevant information to the Principal Permittees' contractor for follow up action.

Upon identification or notification, the Principal Permittees' contractor will create a Memorandum to the City that includes information regarding how the discharge was reported (field evaluation, desktop targeted, miscellaneous report, or citizen / business notification) field screening observations and lab results. The memo will be updated with the dates, times, and details of every activity related to the illicit discharge until it is eliminated or removed. The Principal Permittees' contractor will maintain a record of all correspondence and field visits for each potential illicit discharge and tracking forms will be updated when any new information is received. Record(s) for each calendar year will be provided to the City of Delaware City no later than April 1 the following year. The City of Delaware City will maintain all records for a period of at least five (5) years.

The relationship between the City of Delaware City and the Principal Permittees' contractor is described in the Inter-jurisdictional agreement included as Appendix D1 in the Stormwater Pollution Prevention and Management Plan (SWPP & MP).

Elimination and Enforcement Actions

The Principal Permittees' contractor will follow the procedures identified in Appendix G in the Stormwater Pollution Prevention and Management Plan (SWPP & MP). The City of Delaware City will be copied on any correspondences with any resident or business located within the City limits.

If the responsible party does not eliminate the discharge or provide satisfactory explanation, or if it is later found that the written plan is not being followed, the Principal Permittees' contractor will notify the City. The City may provide follow-up communications with the responsible party at its discretion. If warranted, the City will file charges in Justice of the Peace (JP) Court for violating Chapter 31 of the City of Delaware City Code.

If needed, the City will contact DNREC's Office of Community Services' Environmental Crimes Unit. The ECU maintains a toll-free 24-hour complaint line at 800-662-8802). All of DNREC's Environmental officers are certified police officers with full police powers. The City will report discharges of major spills, fish kills, and immediate environmental hazards immediately to DNREC.

Door Hanger Distribution

In residential neighborhoods where dumping of materials into the MS4 is suspected or reported, the Principal Permittees' contractor will distribute Stormwater Pollution Awareness Door Hangers (sample provided in Appendix G in the Stormwater Pollution Prevention and Management Plan (SWPP & MP) which will be modified for use in Delaware City). The following information will be presented on the door hangers:

- The type of illicit discharge that was found in the storm sewer system
- The location of affected structure
- The potentially affected water body
- The importance of stormwater management
- Guidelines for reducing stormwater runoff pollution
- City of Delaware City contact information for illegal discharge information

Dry Detention Practices

Project ID _____ County New Castle

Site Name: Delaware City - Cutting Edge - Pond 2

General Location of BMP In front of the Cutting Edge parking lot - across from the Italian Restaurant

Ownership:

- Private
 Public

BMP Type:

- Dry Pond - embankment
 Dry Pond - no embankment
 Dry Pond - extended detention

Type of Site:

- Residential
 Commercial
 Industrial
 State

Other site notes:

Review date 4/11/18 Review time 1:00 pm Reviewer Larry Schwartz

Post Construction Verification Docs available: Y N Date of last review 7/7/17

Nature of Problem

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Access				
10' access path to facility (mowed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Access path around inlets and outlets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Sediment set aside area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

Notes:

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Control of erosion				
Top of slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Side slope and buffer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Inlet structures or channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Outlet channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Emergency spillway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

Notes:

- Minor erosion

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Control of sediment accumulation				
Pond bottom	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Forebay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Inlet structures or channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outlet structures or channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Side slope and buffers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Condition of riprap				
Outlet channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Inlet channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

• Type of Riser and Trash Rack Problem_				
<input type="checkbox"/> Not applicable to this BMP				
<input checked="" type="checkbox"/> Concrete				
Spalling/Cracking				See note 2
Exposed reinforcement				
<input type="checkbox"/> Metal				
Rusting				
Joint leaking				
Debris deposit on trash rack				

Notes:

2. Minor spalling.

- Trash & litter in BMP
 - No
 - Yes _____
- Inadequate Vegetation Cover (stabilization)
 - No
 - Yes, Location _____
- Unwanted bike trails or animal burrows
 - No
 - Yes _____
- Buffer
 - No
 - Yes _____

Notes:

- Unwanted vegetation/trees
 - Noxious weeds
 - None
 - Phragmites % coverage _____
 - Cattail % coverage _____
 - Trees % coverage _____
 - Other % coverage _____

Notes

Notes:

Embankment Ponds Only

- Embankment Pond?
 - No (please skip this section)
 - Yes (please complete the following section)

- Trees (not including shrubs) on embankment
 - No
 - Yes, Location _____ (If yes, remove trees)

Notes:

- Condition of embankment
 - No issues
 - Longitudinal cracks
 - Transverse cracks
 - Local depression or bulges
 - Any settlement
 - Any misalignment
 - Toe of slope wet
 - Seepage or boils present at toe of slope

Notes

Notes:

- Overall BMP Condition

Good

Fair

Poor

Required Corrective Action(s) Compiled from the notes within the report:

Action To Be Completed By (Date): _____

Reviewer's Signature: _____

Vegetated Channel

Project ID _____ County New Castle

Site name: Delaware City - Washington Street Channel

General Location of BMP In parking lot behind Post Office north side of Washington Street

Ownership:

- Private
- Public

Type of Site:

- Residential
- Commercial
- Industrial
- State

Notes about the type of channel or site notes:

Review date 4/12/18 Review time 11:00 am Reviewer Larry Schwartz

Post Construction Verification Docs available: Y N Date of last review 7/717

Copyright 2012 by Delaware Department of Transportation, Delaware Department of Agriculture, Delaware Department of Natural Resources and Environmental Control, Delaware Department of Public Safety, Delaware Department of Transportation, Delaware Department of Agriculture, Delaware Department of Natural Resources and Environmental Control, Delaware Department of Public Safety

- | | <u>Good</u> | <u>Fair</u> | <u>Poor</u> |
|-------------------|--------------------------|-------------------------------------|--------------------------|
| • Erosion Control | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Notes:

- | | | | |
|---------------------------|-------------------------------------|--------------------------|--------------------------|
| • Condition of Vegetation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---------------------------|-------------------------------------|--------------------------|--------------------------|

Notes:

Some erosion.

- Seeding Required?
 No Yes (where) _____
Recommended species _____
- Ponding evident in channel?
 No Yes (where) _____
- Presence of Trash/debris?
 No Yes (where) _____
- Mowing height too low?
 No Yes (where) _____
Recommended mowing height _____

- Overall BMP Condition

Good Fair Poor

Required Corrective Action(s) Compiled from the notes and observations within the report:

1. Channel could use some minor maintenance.

Action To Be Completed By (Date): _____

Reviewer's Signature: _____

03/2013

5.01.3.8-2

Dry Detention Practices

Project ID _____ County New Castle

Site Name: Delaware City - Cutting Edge - Pond 1

General Location of BMP In front of the Cutting Edge parking lot - across from the Valero

Ownership:

- Private
 Public

BMP Type:

- Dry Pond - embankment
 Dry Pond - no embankment
 Dry Pond - extended detention

Type of Site:

- Residential
 Commercial
 Industrial
 State

Other site notes:

Review date 4/11/18

Review time 10:45

Reviewer Larry Schwartz

Post Construction Verification Docs available: Y N

Date of last review _____

Nature of Problem

- Access
 - 10' access path to facility (mowed)
 - Access path around inlets and outlets
 - Sediment set aside area

<u>Good</u>	<u>Fair</u>	<u>Poor</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes

 N/A

Notes:

- Control of erosion
 - Top of slope
 - Side slope and buffer
 - Inlet structures or channels
 - Outlet channel
 - Emergency spillway

<u>Good</u>	<u>Fair</u>	<u>Poor</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes

 See note 1

 N/A

Notes:

1. Minor erosion

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Control of sediment accumulation				
Pond bottom	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Forebay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Inlet structures or channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outlet structures or channels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Side slope and buffers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Notes</u>
• Condition of riprap				
Outlet channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Inlet channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/a
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

• Type of Riser and Trash Rack Problem_				
<input type="checkbox"/> Not applicable to this BMP				
<input checked="" type="checkbox"/> Concrete				See note 2
Spalling/Cracking				
Exposed reinforcement				
<input type="checkbox"/> Metal				
Rusting				
Joint leaking				
Debris deposit on trash rack				

Notes:

2. Minor spalling.

- Trash & litter in BMP
 - No
 - Yes _____
- Inadequate Vegetation Cover (stabilization)
 - No
 - Yes, Location _____
- Unwanted bike trails or animal burrows
 - No
 - Yes _____
- Buffer
 - No
 - Yes _____

Notes:

- Unwanted vegetation/trees
 - Noxious weeds
 - None
 - Phragmites % coverage _____
 - Cattail % coverage _____
 - Trees % coverage _____
 - Other % coverage _____

Notes

Notes:

Embankment Ponds Only

- Embankment Pond?
 - No (please skip this section)
 - Yes (please complete the following section)

- Trees (not including shrubs) on embankment
 - No
 - Yes, Location _____ (If yes, remove trees)

Notes:

- Condition of embankment
 - No issues
 - Longitudinal cracks
 - Transverse cracks
 - Local depression or bulges
 - Any settlement
 - Any misalignment
 - Toe of slope wet
 - Seepage or boils present at toe of slope

Notes

Notes:

- Overall BMP Condition

Good

Fair

Poor

Required Corrective Action(s) Compiled from the notes within the report:

Monitor erosion and spalling.

Action To Be Completed By (Date): _____

Reviewer's Signature: _____

"A Historic Past"



"A Bright Future"

THE CITY OF DELAWARE CITY

407 Clinton Street – P.O. Box 4159

Delaware City, Delaware 19706

Phone: 302-834-4573 Fax: 302-832-5545

April, 2019

**INVENTORY of FACILITIES
City of Delaware City**

Facility	Type of Use	Description	Parcel Size	Address	Comments
The Cutting Edge	Material, Vehicle & Equipment Storage	Public Works Yard	144.9 x 440.8	601 Fifth Street	Stores mulch
Battery Park	Public Park	Gazebo, Walking Path, and Boat Lock	629.1 x 206.4	Battery Park	Maintenance performed by our contractor, The Cutting Edge
Seventh Street Park	Public Park	Playground Equipment	420 x 627	Seventh Street Park	Maintenance performed by our contractor, The Cutting Edge
Pump House/Well 4	Restore Window Sashes	Steam Tables and equipment to renovate historic windows	100 x 104	321 Washington St/506 Fourth St	Equipment maintained by the Challenge Program

**City of Delaware City
Good Housekeeping Stormwater Inspection Report**

FACILITY NAME: *The Cutting Edge-Public* **INSPECTION TIME:** *9:54AM* **DATE:** *4-2-19*

WEATHER INFORMATION: *WORKS YARD*

- Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.):
Sunny
- Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: Yes No Comments:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Vehicle/Equipment Areas:	Yes	No	NA	Findings and Remedial Action Documentation:
<p>Equipment cleaning: Check NA if not performed on-site. Skip section.</p> <p>Is equipment washed and/or cleaned only in designated areas?</p> <ul style="list-style-type: none"> • Observe washing: Is all wash water captured and properly disposed of? 		X		
<p>Equipment fueling: Check NA if not performed on-site. Skip section.</p> <ul style="list-style-type: none"> • Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? • Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? • Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> ○ If not, is there any water or other fluids accumulated within the containment area? 	X			<p><i>All fuel tanks are in self contained concrete retention center with emergency fuel shut-off valve</i></p> <p>VALVED</p>

Equipment maintenance:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> • Are maintenance tools, equipment and materials stored under shelter, elevated and covered? • Are all drums and containers of fluids stored with proper cover and containment? • Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. • Is there evidence of leaks or spills since last inspection? Identify and address. <p>Add any additional site-specific BMPs:</p> <p>_____</p> <p>_____</p> <p>_____</p>	X			<p>No Drums</p>


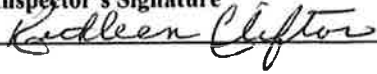
I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Good Housekeeping BMPs:	Yes	No	NA	Findings and Remedial Action Documentation:
1. Are paved surfaces free of accumulated dust/sediment and debris? <ul style="list-style-type: none"> Are there areas of erosion or sediment/dust sources that discharge to storm drains? 	X			Dumpsters
2. Are there an adequate number of waste receptacles?	X			
3. Are waste receptacles in good condition and not leaking contaminants?	X			
4. Is litter routinely collected?	X			
5. Are stockpiled materials (including road salt) stored in such a manner that they do not allow the discharge of contaminants to the MS4?	X			
6. Other areas of concern?: <hr/> <hr/> <hr/> <hr/> <hr/>				

Observation of Stormwater Discharges:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? 	X			

<ul style="list-style-type: none"> II. CORRECTIVE ACTION DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs. <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				
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III. CERTIFICATION STATEMENTS AND SIGNATURES:

Kathleen Clifton		Land Use Administrator	4-2-19
Inspector's Name - Printed	Inspector's Signature	Inspector's Title	Date
KATHLEEN CLIFTON		Land Use Administrator	4-2-19

**City of Delaware City
Good Housekeeping Stormwater Inspection Report**

FACILITY NAME: Seventh Street Park **INSPECTION TIME:** 10:00 AM **DATE:** 4-2-19

WEATHER INFORMATION:

- Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.):
Sunny
- Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: Yes No Comments:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Vehicle/Equipment Areas:	Yes	No	NA	Findings and Remedial Action Documentation:
<p><i>Equipment cleaning: Check NA if not performed on-site. Skip section.</i></p> <p>Is equipment washed and/or cleaned only in designated areas?</p> <ul style="list-style-type: none"> Observe washing: Is all wash water captured and properly disposed of? 			X	
<p><i>Equipment fueling: Check NA if not performed on-site. Skip section.</i></p> <ul style="list-style-type: none"> Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> If not, is there any water or other fluids accumulated within the containment area? 			X X X	

Equipment maintenance:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Are maintenance tools, equipment and materials stored under shelter, elevated and covered? Are all drums and containers of fluids stored with proper cover and containment? Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. Is there evidence of leaks or spills since last inspection? Identify and address. <p>Add any additional site-specific BMPs:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>			X X X X	

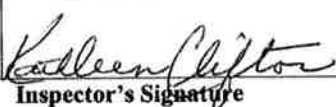
I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Good Housekeeping BMPs:	Yes	No	NA	Findings and Remedial Action Documentation:
1. Are paved surfaces free of accumulated dust/sediment and debris?	X			
<ul style="list-style-type: none"> Are there areas of erosion or sediment/dust sources that discharge to storm drains? 		X		
2. Are there an adequate number of waste receptacles?	X			
3. Are waste receptacles in good condition and not leaking contaminants?	X			
4. Is litter routinely collected?	X			
5. Are stockpiled materials (including road salt) stored in such a manner that they do not allow the discharge of contaminants to the MS4?			X	
6. Other areas of concern?: _____ _____ _____ _____ _____				

Observation of Stormwater Discharges:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? 			X	

• II. CORRECTIVE ACTION DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Kathleen Clifton		LAND USE ADMINISTRATOR	4-2-19
Inspector's Name – Printed	Inspector's Signature	Inspector's Title	Date

**City of Delaware City
Good Housekeeping Stormwater Inspection Report**

FACILITY NAME: Pump House - Well 4 **INSPECTION TIME:** 9:51AM **DATE:** 4-2-19

WEATHER INFORMATION:

- Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.):
Sunny
- Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: Yes No Comments:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Vehicle/Equipment Areas:	Yes	No	NA	Findings and Remedial Action Documentation:
<p>Equipment cleaning: Check NA if not performed on-site. Skip section.</p> <p>Is equipment washed and/or cleaned only in designated areas?</p> <ul style="list-style-type: none"> Observe washing: Is all wash water captured and properly disposed of? <p>Equipment fueling: Check NA if not performed on-site. Skip section.</p> <ul style="list-style-type: none"> Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> If not, is there any water or other fluids accumulated within the containment area? 			X	

Equipment maintenance:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Are maintenance tools, equipment and materials stored under shelter, elevated and covered? Are all drums and containers of fluids stored with proper cover and containment? Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. Is there evidence of leaks or spills since last inspection? Identify and address. <p>Add any additional site-specific BMPs:</p> <p>_____</p> <p>_____</p> <p>_____</p>			X	

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Good Housekeeping BMPs:	Yes	No	NA	Findings and Remedial Action Documentation:
1. Are paved surfaces free of accumulated dust/sediment and debris?	X			
<ul style="list-style-type: none"> Are there areas of erosion or sediment/dust sources that discharge to storm drains? 		X		
2. Are there an adequate number of waste receptacles?	X			
3. Are waste receptacles in good condition and not leaking contaminants?	X			
4. Is litter routinely collected?			X	
5. Are stockpiled materials (including road salt) stored in such a manner that they do not allow the discharge of contaminants to the MS4?			X	
6. Other areas of concern?: _____ _____ _____ _____ _____				

Observation of Stormwater Discharges:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? 			X	

• II. CORRECTIVE ACTION DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Kathleen Clifton	Kathleen Clifton	Land Use Administrator	4/2/19
Inspector's Name - Printed Kathleen Clifton	Inspector's Signature Kathleen Clifton	Inspector's Title Land Use Administrator	Date 4-2-19

**City of Delaware City
Good Housekeeping Stormwater Inspection Report**

FACILITY NAME: Battery Park **INSPECTION TIME:** 9:48 AM **DATE:** 4-2-19

WEATHER INFORMATION:

- Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.):
Sunny
- Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: Yes No Comments:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Vehicle/Equipment Areas:	Yes	No	NA	Findings and Remedial Action Documentation:
<p>Equipment cleaning: Check NA if not performed on-site. Skip section.</p> <p>Is equipment washed and/or cleaned only in designated areas?</p> <ul style="list-style-type: none"> Observe washing: Is all wash water captured and properly disposed of? <p>Equipment fueling: Check NA if not performed on-site. Skip section.</p> <ul style="list-style-type: none"> Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> If not, is there any water or other fluids accumulated within the containment area? 			X X X X X X	
<p>Equipment maintenance:</p> <ul style="list-style-type: none"> Are maintenance tools, equipment and materials stored under shelter, elevated and covered? Are all drums and containers of fluids stored with proper cover and containment? Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. Is there evidence of leaks or spills since last inspection? Identify and address. <p>Add any additional site-specific BMPs:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>			X X X X	

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Good Housekeeping BMPs:	Yes	No	NA	Findings and Remedial Action Documentation:
1. Are paved surfaces free of accumulated dust/sediment and debris?	X			
<ul style="list-style-type: none"> Are there areas of erosion or sediment/dust sources that discharge to storm drains? 		X		
2. Are there an adequate number of waste receptacles?	X			
3. Are waste receptacles in good condition and not leaking contaminants?	X			
4. Is litter routinely collected?	X			
5. Are stockpiled materials (including road salt) stored in such a manner that they do not allow the discharge of contaminants to the MS4?			X	
6. Other areas of concern?: _____ _____ _____ _____ _____				

Observation of Stormwater Discharges:	Yes	No	NA	Findings and Remedial Action Documentation:
<ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? 			X	

• II. CORRECTIVE ACTION DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Kathleen Clifton	<i>Kathleen Clifton</i>	Land Use Administrator	4/2/19
Inspector's Name - Printed	Inspector's Signature	Inspector's Title	Date

Chapter 31
Storm Water Protection

- Section 31-1 Purpose and Intent
- Section 31-2 Definitions
- Section 31-3 Applicability
- Section 31-4 Responsibility for Administration
- Section 31-5 Minimum Standards
- Section 31-6 Discharge and Connection Prohibitions
- Section 31-7 Suspension of MS4 Access
- Section 31-8 Industrial or Construction Activity Discharges-Notice of Intent
- Section 31-9 Monitoring of Discharges
- Section 31-10 Use of Best Management Practices (BMPs) to Prevent, Control, and Reduce Storm Water Pollutants

- Section 31-11 Watercourse Protection
- Section 31-12 Notification of Spills
- Section 31-13 Enforcement
- Section 31-14 Appeal of Notice of Violation
- Section 31-15 Enforcement Measures after Appeal
- Section 31-16 Cost of Abatement of the Violation
- Section 31-17 Injunctive Relief
- Section 31-18 Compensatory Action
- Section 31-19 Violations Deemed a Public Nuisance
- Section 31-20 Remedies not Exclusive
- Section 31-21 Adoption of Delaware Sediment and Stormwater Management Regulations
- Section 31-22 Applicable Definitions
- Section 31-23 Delegation and Variances
- Section 31-24 Plans and Approvals
- Section 31-25 Right of Entry and Certified Construction Reviewer Reports
- Section 31-26 Maintenance Responsibility Obligations
- Section 31-27 Violations and Withholding of Permit Approvals
- Section 31-28 Liability
- Section 31-29 Minimum Requirements
- Section 31-30 Conflict

Section 31-31 Injunctive Relief

History: This Chapter was Ordinance 07-0409-01 (adopted July 16, 2007).

Sections 31-21 through 31-31 was Ordinance 14-1215-02 adopted on 3-4-15

Section 31-1 Purpose and Intent

The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of the City of Delaware City through the regulation of non-stormwater discharges to the storm drainage system as required by federal and state law. This chapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of the chapter are:

- A. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
- B. To prohibit illicit connections and discharges to the municipal separate storm sewer system.
- C. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter.

Section 31-2 Definitions

As used in this chapter, the following terms shall have the meanings indicated:

AUTHORIZED ENFORCEMENT AGENCY-Employees or designees of the City of Delaware City, ("City") including, but not limited to the City Manager and Law Enforcement Officers of the City.

BEST MANAGEMENT PRACTICES (BMPs) - Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices designed to limit exposure of activities to wet weather and to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CITY - The City of Delaware City, Delaware, a municipal corporation located in New Castle County, Delaware, and any of its officers and employees or their designees.

CLEAN WATER ACT- The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

CONSTRUCTION ACTIVITY- Activities subject to NPDES discharge permits, including but not limited to clearing, grubbing, grading, excavating, and demolition which result in a land disturbance equal to or greater than one (1) acre, including the disturbance of less than one acre of land that is part of a larger common plan of development or sale that will ultimately disturb more than one acre.

HAZARDOUS MATERIALS- Any material, including any substance, waste, or combination thereof, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment.

ILLEGAL DISCHARGE- Any direct or indirect non-stormwater discharge to the storm drain system.

ILLICIT CONNECTIONS- Either of the following:

a.) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system, including but not limited to any conveyances which allow any non-stormwater discharge, including sewage, process wastewater, and wash water, to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or

b.) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

INDUSTRIAL ACTIVITY- Activities subject to NPDES industrial stormwater discharge permits as defined in 40 CFR 122.26(b)(14) and in the State of Delaware *Regulations Governing the Control of Water Pollution*, Section 9.1.01.1.A

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) – A conveyance system, which is not intended to convey anything but stormwater and is owned by a municipal or public entity.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT- A permit issued by the State of Delaware that authorizes the discharge of pollutants to waters of the State, under prescribed conditions, pursuant to Section 6 of the Delaware *Regulations Governing the Control of Water Pollution*, whether the permit is applicable on an individual, group, or general area-wide basis.

NON-STORMWATER DISCHARGE- Any discharge to the storm drain system that is not composed entirely of stormwater.

PERSON- Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT- Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

PREMISES - Any building, lot, or parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.

STORM DRAINAGE SYSTEM - Facilities owned by a government entity by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, ditches, swales, reservoirs, and other drainage structures.

STORMWATER - Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

STORMWATER POLLUTION PREVENTION PLAN (SWPP) - A document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

WASTEWATER- Any water or other liquid, other than stormwater, discharged from a facility.

WATERS OF THE STATE – All water, on the surface and under the ground, wholly or partially within, or bordering the State of Delaware or within its jurisdiction, as defined in the *Delaware Regulations Governing the Control of Water Pollution*, Section 9.1.01.0.

Section 31-3 Applicability

This chapter shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by the City.

Section 31-4 Responsibility for Administration

The City Manager shall administer, implement, and enforce the provisions of this chapter. Any powers granted or duties imposed upon the City as the authorized enforcement agency may be delegated in writing by the City Manager to persons or entities acting in the beneficial interest of or in the employ of the City.

Section 31-5 Minimum Standards

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore, this chapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

Section 31-6 Discharge and Connection Prohibitions

a.). Prohibition of illegal discharges.

(1) No person shall throw, drain, or otherwise discharge, cause to be discharged, or allow others under its control to throw, drain, or otherwise discharge into the

municipal storm drain system or water courses any pollutants, other than stormwater.

(2) The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

(a) The following discharges are exempt from the discharge prohibitions established by this chapter: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, noncommercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if de-chlorinated, typically less than one PPM chlorine), fire-fighting activities, and any other water source not containing pollutants.

(b) Discharges specified in writing by the City as being necessary to protect public health and safety.

(c) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.

(3) The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the federal Environmental Protection Agency (USEPA) or the Delaware Department of Natural Resources and Environmental Control (DNREC), provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

b.). Prohibition of illicit connections.

(1) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.

(2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(3) A person is considered to be in violation of this chapter if the person connects a line conveying sewage to the MS4, or allows such a connection to continue

(4) Existing connections in violation of this chapter must be disconnected and redirected, if necessary, to an approved wastewater management system or sanitary sewer upon approval of the City and New Castle County.

(5) Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that premises upon receipt of written notice of violation from the City requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the City in a form specified by the City.

Section 31-7 Suspension of MS4 Access

a.) Suspension due to illicit discharges in emergency situations. The City Manager may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the State. If the violator fails to comply with a suspension order issued in an emergency, the City may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the State, or to minimize danger to persons.

b.) Termination due to the detection of illicit discharge.

(1) Any person discharging to the MS4 in violation of this chapter may have his or her MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the City for a reconsideration and hearing.

(2) A person violates this Chapter if the person reinstates MS4 access to premises terminated or suspended pursuant to this section, without the prior approval of the City.

Section 31-8 Industrial or Construction Activity Discharges-Notice of Intent

a.) Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said

permit may be required in a form acceptable to the City Manager prior to the allowing of discharges to the MS4.

b.) The operator of a facility, including construction sites, required to have an NPDES permit to discharge storm water associated with industrial activity shall submit a copy of the Notice of Intent (NOI) to the City at the same time the operator submits the original NOI to DNREC or EPA as applicable.

c.) The copy of the Notice of Intent may be delivered to the City either in person to Town Hall at 407 Clinton Street, Delaware City or by mailing to:

Notice of Intent to Discharge Storm Water
City of Delaware City
P.O. Box 4159
Delaware City, DE 19706

d.) A person is in violation of this Chapter if the person operates a facility that is discharging storm water associated with industrial activity, including construction, without having submitted a copy of the Notice of Intent to do so to the City.

Section 31-9 Monitoring of Discharges

a.) Applicability. This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

b.) Access to facilities.

(1) The City Manager or his authorized designees shall be permitted to enter and inspect facilities subject to regulation under this Chapter as often as may be necessary to determine compliance with this chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the City.

(2) Facility operators shall allow the City Manager or his designees ready access to all parts of the premises for the purposes of inspection, sampling, examination, and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.

(3) The City shall have the right to set up, utilize, maintain, repair, and replace on any permitted facility such devices as are necessary in the opinion of the City to conduct monitoring and/or sampling of the facility's stormwater discharge

(4) The City has the right to require the discharger to install, at discharger's expense, monitoring equipment as the City deems necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated as necessary to ensure their accuracy.

(5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City and shall not be replaced. The costs of clearing such access shall be borne by the operator.

(6) Unreasonable delay in allowing the City access to a permitted facility is a violation of an NPDES stormwater discharge permit and of this Chapter. A person who is the operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity is in violation of this Chapter if the person denies the City reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.

(7) If the City has been refused access to any part of the premises from which stormwater is discharged, and it is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City may seek issuance of a search warrant from any court of competent jurisdiction.

Section 31-10 Use of Best Management Practices (BMPs) to Prevent, Control, and Reduce Stormwater Pollutants

The owner or operator of a commercial or industrial establishment shall provide, at its own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of structural and nonstructural BMPs. Further, any person responsible for a property or premises, which is, or may be, the source of an illegal discharge may be required to implement, at said person's expense,

additional structural and nonstructural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity shall be deemed compliance with the provisions of this section. BMPs may be part of a stormwater pollution prevention plan (SWPP), as necessary, for compliance with requirements of the NPDES permit.

Section 31-11 Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

Section 31-12 Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility of operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or waters of the State, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the City Manager in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City of Delaware City within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years

Section 31-13 Enforcement

a.) Notice of violation. Whenever the City finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the City may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analyses, and reporting;
- (2) The elimination of illicit connections or illegal discharges;
- (3) That violating discharges, practices, or operations shall cease and desist;
- (4) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
- (5) Payment of a fine to cover administrative and remediation costs; and
- (6) The implementation of source control or treatment BMPs.

b.) If abatement of a violation and/or restoration of affected premises is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator as its personal obligation. Such costs shall constitute a lien on the premises until paid which shall accrue interest at the rate by 6 Del. C. Section 2301, and the City shall be entitled to an award of all court costs, legal fees, and expert witness fees associated with the perfection and execution of such lien or the collection of the underlying obligation.

Section 31-14 Appeal of Notice of Violation

Any person receiving a notice of violation may appeal the determination of the City Manager to the Delaware City Board of Adjustment. The notice of appeal must be in writing, shall specify the reasons and grounds for the appeal, and must be received within 10 days from the date of the notice of violation. A hearing on the appeal by the Board of Adjustment shall take place within 25 days from the date of receipt of the notice of appeal.

Section 31-15 Enforcement Measures after Appeal

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within 15 days of the decision of the Mayor & Council upholding the decision of the City Manager, then representatives of the City may enter upon the subject private premises and are authorized to take any and all measures necessary to abate the violation and/or restore the premises. It shall be unlawful for any person, owner, agent or person

in possession of any premises to prevent the City or its designated contractor to enter upon the premises for the purposes set forth above.

Section 31-16 Cost of Abatement of the Violation

Within 10 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 10 days. If the amount due is not paid within a timely manner as determined by the decision of Mayor & Council or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this chapter shall become personally liable to the City by reason of such violation for all costs, fees, damages and expenses incurred or caused by the violation and the remediation of same. The liability shall include per-annum interest on the total amount due, computed on the amount outstanding at the rate provided by 6 Del. C. § 2301.

Section 31-17 Injunction Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate the provisions of this chapter, the City may petition for a temporary restraining order, preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

Section 31-18 Compensatory Action

In lieu of enforcement proceedings, penalties, and remedies authorized by this chapter, the City may impose upon a violator alternative compensatory action, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

Section 31-19 Violations Deemed a Public Nuisance

Any person who has violated or continues to violate this chapter shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$200 per violation per day and/or imprisonment for a period of time not to exceed 120 days. The City may recover all attorneys' fees, court costs and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses.

Section 31-20 Remedies Not Exclusive

The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law, and it is within the discretion of the City to seek cumulative remedies.”

Section 31-21 Adoption of Delaware Sediment and Stormwater Management Regulations

A certain document, a copy of which is on file at City Hall of the City of Delaware City, being marked and designated as the Delaware Sediment and Storm Water Regulations issued by the Delaware Department of Natural Resources and Environmental Control (“DNREC”), as may be amended by DNREC from time to time, is hereby adopted by the City of Delaware City as if set forth fully herein. Except as exempted in the Delaware Sediment and Stormwater Regulations, no person or entity shall engage in any land-disturbing activity in the City until such person or entity has submitted and obtained approval for a sediment and stormwater permit.

Section 31-22 Applicable Definitions

The definitions in the Delaware Sediment and Stormwater Management Regulations shall apply to Section 31-21 through Section 31-30 of this Chapter and shall not apply to Sections 31-1 through 31-20 of this Chapter.

Section 31-23 Delegation and Variances

The Delegated Agency under the Delaware Sediment and Storm Water Regulations for all districts, except for the Historic Preservation and Redevelopment (“HPR”) District, is the New Castle County Conservation District. The Delegated Agency for the HPR District is DNREC. The New Castle County Conservation District or DNREC (as applicable) shall be responsible for, among other things, plan reviews, and enforcement pursuant to the Delaware Sediment and Stormwater Management Regulations (Section 3.0-10.0). All requests for variances from the requirements of the Delaware Sediment and Stormwater Regulations adopted hereunder by the City of Delaware City shall be directed to DNREC, as provided for in Section 1.5 of the Delaware Sediment and Storm Water Regulations as may be amended from time to time. The decision and appeals provision therein shall govern all variances and other requests.

Section 31-24 Plans and Approvals

Whenever a sediment and/or stormwater management plan is required, the plans shall conform to the most current Delaware Sediment and Stormwater Regulations. Applicants are

required to pay all fees and fines assessed or charged by DNREC or the New Castle County Conservation District. No subdivision approvals, building permit approvals, or other land use related approvals shall be granted unless and until DNREC or the New Castle Conservation District confirms, in writing, that all necessary approvals have been received, and that all financial guarantees (if applicable) have been implemented.

Section 31-25 Right of Entry and Certified Construction Reviewer Reports

Whenever the Delaware Sediment and Stormwater Regulations allow for a site visit, a construction review, or a maintenance review, the City Manager or persons authorized by the City Manager in writing may visit the site, perform a review, inspect, or attend meetings in the same manner as a representative of DNREC or the New Castle County Conservation District is authorized. Copies of all Certified Construction Reviewer Reports shall be submitted to the City at the same time such reports are submitted to DNREC or the New Castle County Conservations District.

Section 31-26 Maintenance Responsibility Obligations

Delaware City shall not accept maintenance responsibility for any stormwater management system unless a legal agreement between the Owner of the system and the City is approved by the City Council.

Section 31-27 Violations and Withholding of Permit Approvals

If DNREC or the New Castle County Council Conservation District find violations, seek enforcement, or if fines and penalties are outstanding, upon request of the requesting agency, the City of Delaware City shall withhold any future permits for the project until DNREC or the New Castle County Council Conservation District confirm in writing that the violations or applicable penalties are remedied.

Section 31-28 Liability

Nothing in this Chapter shall create any liability for loss for damage resulting from the failure of the City to perform any responsibility stated in this Chapter or obligate the City to make any appropriation or to expend any money not appropriated for any purpose stated in this Chapter.

Section 31-29 Minimum Requirements

The Delaware Sediment and Stormwater Regulations are minimum requirements. The City, DNREC, or the New Castle County Conservation District may require more stringent requirements in certain situations based on historical drainage, flooding problems, preservation or environmentally sensitive areas, or based on site specific circumstances.

Section 31-30 Conflict

Where there is a conflict between a provision in this Chapter and another chapter of the City Code or the Delaware Sediment and Stormwater Regulations, the more restrictive provision or interpretation shall apply.

Section 31-31 Injunctive Relief

In addition to the penalties and enforcement mechanisms available to DNREC or the New Castle County Conservation District, the City Manager or the City Council may authorize the City to seek injunctive relief for violations of the Delaware Sediment and Stormwater Management Regulations adopted by reference hereunder. If the City prevails in an action for injunctive relief, the City shall receive an award of all attorneys' fees and costs incurred, which may be enforced against the violator and /or the property owner jointly and severally.¹

¹ Section 31-21 through 31-31 was created by Ordinance 14-1215-02 (adopted on March 4, 2015)

MATTHEW MEYER
COUNTY EXECUTIVE



TRACY ZLOCK SURLS
GENERAL MANAGER

187-A OLD CHURCHMANS ROAD
NEW CASTLE, DE 19720
(302) 395-5700

DEPARTMENT OF PUBLIC WORKS
COMMERCIAL/INDUSTRIAL STORMWATER MANAGEMENT SEMINAR
James H. Gilliam Building
November 1, 2018
New Castle County Stormwater Management Website: <http://stormwater.nccde.org>

- 8:30 a.m. – 9:00 a.m. Registration
- 9:00 a.m. – 9:05 a.m. Introductions
- 9:05 a.m. - 9:10 a.m. NPDES (National Pollutant Discharge Elimination System) Permit
Michael Harris, Stormwater and Environmental Programs Manager
New Castle County, Department of Public Works
Michael.Harris@newcastlede.gov, (302) 395-5806
- 9:10 a.m. – 9:30 a.m. DelDOT's Landscape: The Connection between Catch Basins to Lawns
Emily Seldomridge PhD, NPDES Program Manager
State of Delaware, Department of Transportation
Emily.Seldomridge@state.de.us, (302) 760-2195
- 9:30 a.m. – 9:45 a.m. Annual Stormwater Management Maintenance Program
Ellie Mortazavi, Stormwater Program Coordinator
New Castle County, Department of Public Works
Ellie.Mortazavi@newcastlede.gov, (302) 395-5732
- 9:45 a.m. – 9:55 a.m. BREAK
- 9:55 a.m. – 10:15 a.m. Annual Stormwater Management Inspection Process
Bernadette Igo, Stormwater Inspection Supervisor
New Castle County, Department of Public Works
Bernadette.Igo@newcastlede.gov, (302) 395-5743
- 10:15 a.m. – 10:35 a.m. Identification, Control of Common Invasive and Nuisance Vegetation in Stormwater Mgmt. Systems
Kevin Shank, Environmental Scientist
Solitude Lake Management
KShank@Solitudelake.com, 302-329-7664
- 10:35 a.m. – 11:00 a.m. Underground Stormwater Facilities Design and Maintenance
Greg Moore, PE
ADS (Advanced Drainage Systems, Inc.)
Gregory.Moore@ads-pipe.com, (443) 221-9489
- 11:00 a.m. – 11:10 a.m. Annual Subsurface Inspection and Maintenance Logs
Janice Catherman, Asst. Land Use Administrator
New Castle County, Department of Public Works
Janice.Catherman@newcastlede.gov, (302) 395-5754
- 11:10 a.m. – 11:30 a.m. Questions and Answers and Survey

Stacy McNatt
NCC, CE II, PE
Stacy.McNatt@newcastlede.gov
(302) 395-5878

Steven C. Gardner
NCC, Public Works Inspector
Steven.Gardner@newcastlede.gov
(302) 395-5775

Bill Jones
NCC, Public Works Inspector
Paul.Jones@newcastlede.gov
(302) 395-5810

Carolyn Magnotti
NCC, Customer Info. & Assist. Coordinator
Carolyn.Magnotti@newcastlede.gov
(302) 395-5789

HONESTY ★ TRANSPARENCY ★ EFFICIENCY

MATTHEW MEYER
COUNTY EXECUTIVE



TRACY ZLOCK SURLES
GENERAL MANAGER

187-A OLD CHURCHMANS ROAD
NEW CASTLE, DE 19720
(302) 395-5700

DEPARTMENT OF PUBLIC WORKS

RESIDENTIAL STORMWATER MANAGEMENT SEMINAR
James H. Gilliam Building
November 1, 2018

New Castle County Stormwater Management Website: <http://stormwater.nccde.org>

- 5:30 p.m. – 6:00 p.m. Registration
- 6:00 p.m. – 6:05 p.m. Introductions
- 6:05 p.m. – 6:10 p.m. NPDES (National Pollutant Discharge Elimination System) Permit
Michael Harris, Stormwater and Environmental Programs Manager
New Castle County, Department of Public Works
Michael.Harris@newcastlede.gov, (302) 395-5806
- 6:10 p.m. – 6:25 p.m. DelDOT's Landscape: The Connection Between Catch Basins and Lawns
Brian Urbanek, P.E., Assistant Director Statewide Support Services
State of Delaware, Department of Transportation
Brian.Urbanek@state.de.us, (302) 760-2536
- 6:25 p.m. – 6:40 p.m. Annual Stormwater Management Maintenance Program
Elli Mortazavi, Stormwater Program Coordinator,
New Castle County, Department of Public Works
Ellie.Mortazavi@newcastlede.gov, (302) 395-5732
- 6:40 p.m. – 6:55 p.m. Annual Stormwater Management Inspections Process
Bernadette Igo, Stormwater Inspection Supervisor
New Castle County, Department of Public Works
Bernadette.Igo@newcastlede.gov, (302) 395-5743
- 6:55 p.m. – 7:05 p.m. BREAK
- 7:05 p.m. – 7:20 p.m. Stormwater Management Vegetation
Todd Fritchman, Aquatic Biologist/President
Envirotech Environmental Consulting, Inc.
Todd@envirotechcinc.com, (302) 684-5201
- 7:20 p.m. – 7:35 p.m. Creating a Beautiful Neighborhood
Lori Athey, Habitat Outreach Coordinator
Delaware Nature Society
Loria@delnature.org, (302) 239-2334 x142

7:35 p.m. – 7:40 p.m. Stormwater Maintenance Program Annual Registration and Logs
Janice Catherman, Assistant Land Use Administrator
New Castle County, Department of Public Works
Janice.Catherman@newcastlede.gov, (302) 395-5754

7:40 p.m. – 8:30 p.m. Round Table Discussion With Ombudsman's Office:
Debt Collection & General Maintenance Corporation Questions

Christopher J. Curtin, Deputy Attorney General
Common Interest Community Ombudsman
Christopher.Curtin@state.de.us, (302) 577-8600

Kenneth Dunn
Director of Constituent Services, NCC
Kenneth.Dunn@newcastlede.gov, (302) 395-5112

Stacy McNatt
New Castle County, CE II, PE
Stacy.McNatt@newcastlede.gov
(302) 395-5878

Steven C. Gardner
New Castle County, Public Works Inspector
Steven.Gardner@newcastlede.gov
(302) 395-5775

Bill Jones
New Castle County, Public Works Inspector
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(302) 395-5810

Carolyn Magnotti
New Castle County,
Customer Info. & Assist. Coordinator
Carolyn.Magnotti@newcastlede.gov
(302) 395-5789

City of Delaware City
Pesticide, Herbicide and Fertilizer Application
Standard Operating Procedures

General

Delaware City subcontracts out with The Cutting Edge, Inc. for the application of the Herbicide, Round-Up, that is used on City owned property. No Pesticides or Fertilizers are used on City Property.

Enforcement Action

Our subcontractor only uses the non-selective herbicide Round-Up on City owed property to minimize pollutants from going into the Storm Drains and Storm Water System. All Personal Protective Equipment (PPE) per label instructions are used. Round-Up is only applied during dry weather directly to the soil using a manual back pack sprayer. Round-Up is diluted as is stated on the label to further protect from polluting the storm water system. All instructions on the label are followed.

MEETING AGENDA
2018 Annual Phase I MS4 Co-Permittee Meeting
New Castle County – Connor Building
March 5, 2019 – 9:30 AM

1. Updates

- a. Co-permittees
- b. DNREC
 - i. New Staff: Gordon Woodrow
 - ii. Audits vs inspections
 - iii. Future Permits: Public notice in April
 - iv. New Sediment and Stormwater Regulations effective February 11, 2019
- c. Reports
 - i. 2018 Annual Reports due May 1, 2019
 - ii. SWPP&MP Effectiveness Report due August 7, 2019

2. Water Quality Improvement Plans (WQIPs)

- a. WQIPs due August 7, 2019
- b. Status report of WQIP development
 - i. Process
 - ii. Concept Plans
 - iii. Credits
- c. Cost sharing agreement

3. Co-Permittee To-Do List

- a. Review Annual/Recurring Tasks Handout
 - i. Documentation needed for 2017 & 2018 Tasks
 - ii. 2019 Tasks
 - iii. Future tasks: Wet weather monitoring

4. Open Discussion

NPDES Phase I MS4 Permit Covering New Castle County
NPDES Permit No. DE 0051071 / State Permit No. WPCC 3063A/96

2019 Annual Phase I MS4 Co-Permittee Meeting

SUBJECT: 2019 Annual Phase I MS4 Co-Permittee Meeting Minutes-Action Items

DATE: March 5, 2019

TIME: 9:30 AM

LOCATION: New Castle County, Special Services

ATTENDEES: *Alphabetical Order by First Name:*
Alison Quimby, City of Wilmington – Co-Permittee
Andrew Bowman, New Castle Conservation District
Brian Urbanek, Delaware Department of Transportation – Principal Permittee
Bruce Thompson, KCI Technologies, Inc.
Diana Reed, Town of Elsmere – Co-Permittee
Ellie Mortazavi, New Castle County – Principal Permittee
Emily Seldomridge, Delaware Department of Transportation – Principal Permittee
Jeffrey Bergstrom, City of New Castle – Co-Permittee
Kathleen Clifton, City of Delaware City – Co-Permittee
Leah Gaffney, Representing City of Wilmington – Co-Permittee
Matthew Ortynsky, KCI Technologies, Inc.
Michael Harris, New Castle County – Principal Permittee
Richard Fain, New Castle Conservation District
Ross McGinn, City of Delaware City – Co-Permittee
Sara Esposito, Delaware Department of Transportation – Principal Permittee
Stacy McNatt, New Castle County – Principal Permittee

Permittees Not in Attendance:

Town of Bellefonte – Co-Permittee
City of Newport – Co-Permittee

FUTURE DATE: March 2020

PURPOSE OF THE MEETING:

The purpose of the meeting was to discuss current tasks and ongoing issues, work completed, and future planning and scheduling activities with regard to the Phase I MS4 Permit. An Action Items Summary is attached.

MATERIALS DISTRIBUTED:

- Meeting Agenda.
- Co-Permittee To-Do List.
- WQIP Timeline.
- Christina River Watershed Water Quality Improvement Plan (WQIP) Draft Plan.

THE FOLLOWING ITEMS WERE DISCUSSED:

➤ **UPDATES**

- **Co-Permittees**
 - No comments.
- **DNREC**
 - DeIDOT and New Castle County met with DNREC on 01-10-19 and were notified that Judy Gordon was replaced by Gordon Woodrow. Gordon has a strong EPA background and will be heavily involved on the MS4 permit side of things, particularly audits, inspections, etc.
 - Audits assess the entire MS4 permit, whereas inspections assess individual minimum control measures. DNREC will conduct inspections on smaller municipalities not previously inspected beginning in Spring 2019. Newark was notified of pending inspections. DNREC will conduct a full Program Audit in conjunction with the Sediment and Stormwater Program Audit in 2020.
 - DNREC anticipates the new Phase II Permit will be out for public notice in April 2019, and the new Phase I Permit will be released in May 2019 for internal review and comment.
- **New Sediment and Stormwater Regulations effective 02-11-19**
 - This affects mainly the WQIP crediting. All credits estimated for the WQIPs are based on pre-02-11-19 stormwater regulations. New stormwater regulations are not as strict as previous regulations, thereby allowing potential to receive more credit related to impervious area treated.
- **Reports**
 - All Co-Permittees must submit their 2018 Annual Report to Mike Harris (NCC) by 05-01-19.
 - The SWPP&MP Effectiveness Report(s) is due 08-07-19.

➤ **WATER QUALITY IMPROVEMENT PLANS (WQIPs)**

- **Process**
 - Sara Esposito (DeIDOT) reviewed the Draft WQIP Report and asked all permittees to submit questions to DeIDOT and New Castle County.
 - Sara reviewed the WQIP Timeline and milestone dates.
 - Sara stated the Christina River WQIP is the template for the Dragon Run WQIP, as well as future WQIPs that may be required.

- **Concept Plans**
 - DeIDOT stated instead of creating site-specific concept plans for each restoration project, DNREC approved developing a concept plan per type of BMP. These general concept plans will be used for both the Christina River and Dragon Run WQIPs, as well as in future WQIPs.

- **Credits**
 - DeIDOT stated the 3% restoration requirement for Christina River Watershed is a total of about 224 acres. Projects with BMPs that treat impervious area from 2007 – February 7, 2017 can be used to reduce the EIA identified. Each Co-Permittee will be responsible for implementing projects that treat their individual portion of the 3% EIA requirement that falls within their municipal boundary. The municipalities listed below had following comments:
 - Wilmington has already implemented a project restoring 19 acres of impervious area. This exceeds their 15 acre requirement. They have decided to donate the four extra acres toward the 224 acre restoration requirement.
 - Elsmere has two stream restoration projects (Silver Brook Run and Little Mill Creek) they would like to count toward their part of the restoration credit. Stacy McNatt (NCC) stated she reviewed these projects, and there was no water quality component related to these stream restorations; therefore, these projects do not count toward their restoration requirement.
 - Elsmere is investigating credit for street sweeping above and beyond their requirements in the SWPP&MP.

- **Cost-Sharing Agreement**
 - DeIDOT stated they are willing to partner and cost-share to help Co-Permittees reach their individual 3% restoration requirement. DeIDOT estimates the cost per acre of impervious restoration will be approximately \$125,000. This option would allow Co-Permittees to collaborate with DeIDOT and New Castle County if they are having troubling finding areas to restore within their municipal boundary.

➤ **CO-PERMITTEE TO-DO LIST**

- **GRP-1:** Permit requires Co-Permittees meet with Co-Principal Permittees annually, which is the purpose of this meeting.

- **GRP-2:** Send documentation (Appendix C MS4 Report Form) to New Castle County by 05-01-19. The MS4 Report Form is the same as last year; Ellie Mortazavi (NCC) can email if needed.

- **GRP-3:** Annual training is required.
 - New Castle County held their Annual Symposium in November 2018.
 - DeIDOT requested Co-Permittees submit documentation of staff training with their Appendix C MS4 Report Form.

- **PEI-2:** Every Permittee has a website, with the exception of Bellefonte, whose outfalls are included in DelDOT's screening.
 - All Permittees in attendance agreed they should be able to meet their impressions.
 - Emily Seldomridge (DelDOT) stated DelDOT is working with Aloysius, Butler, and Clark on the Livable Lawns social media and will share this information with any Co-Permittee upon request.
 - Appendix F.
 - Stacy McNatt (NCC) stated New Castle County has a list of public and private locations where residents can recycle used motor oil.
 - Other strategies include:
 - Creating a County-specific list of household hazardous waste events and drop off locations and making this available on-line.
 - Strategies to disseminate information more effectively.
 - Loaner storm drain stopper program.
 - Partnering for clean-up activities.

- **IDDE-2:** Every Permittee is individually responsible for implementation of their IDDE program.
 - KCI is currently providing these services for DelDOT, New Castle County, City of New Castle, Elsmere and Delaware City. Representatives from Newport and Bellefonte did not attend the meeting and their status of this requirement is unknown.

- **IDDE-3:** 302STOPPIT allows citizens to call, text, or email about all stormwater pollution issues.
 - Julie Scheu (KCI) receives all 302STOPPIT communication and contacts the appropriate municipality.
 - This satisfies IDDE-3 requirement.

- **IDDE-4:** Every Permittee is required to coordinate the evaluation and screening of outfalls to provide their own screening.
 - KCI is conducting outfall screening evaluation for DelDOT and New Castle County. Due to the size of City of New Castle, Elsmere and Delaware City, KCI is screening 20% of their outfalls each year.

- **SMDC-1:** New Castle Conservation District (NCCD) inspects construction sites.
 - Andy Bowman (NCCD) stated NCCD has contracts with Elsmere, Delaware City and City of New Castle.
 - Andy sends inspection forms to NCCD-contracted municipalities, who should ensure they receive the forms.
 - Andy will provide an Annual Report by 04-01-19 to Elsmere, Delaware City and City of New Castle.

- **PCSM-1:** Privately owned stormwater management structures are inspected each year by NCCD and the total number of BMPs is provided.
 - Andy stated NCCD has contracts with Elsmere, Delaware City and City of New Castle.
 - Andy will provide an Annual Report by 04-01-19 to Elsmere, Delaware City and City of New Castle.

- **PCSM-2:** Publically owned stormwater management structures are inspected each year by NCCD and the total number of BMPs is provided.
 - Andy stated NCCD has contracts with Elsmere, Delaware City and City of New Castle.
 - Andy will provide an Annual Report by 04-01-19 to Elsmere, Delaware City and City of New Castle.

- **PCSM-3:** Co-Permittees each maintain individual databases in the form of an excel spreadsheet, but currently do not have BMP locations collected in a mapping format.
 - Diana Reed (Elsmere) stated Elsmere has approximately five BMPs they need to map.
 - Bruce Thompson (KCI) stated KCI can add BMP locations to the database for a Co-Permittee, if they can provide BMP location, year built, type, and drainage area if available.

- **GH-1:** Any facility with industrial activity requires a Stormwater Pollution Prevention Plan (SWPPP). Other facilities (e.g., parks, park and rides, etc.) require an annual non-permitted facility stormwater inspection.
 - City of New Castle and Elsmere are currently meeting this requirement.
 - Delaware City is unsure if their facility falls under this requirement, as washing, fueling and vehicle maintenance are conducted off-site. KCI will meet with Kathy Clifton (Delaware City) to discuss the requirement.
 - Representatives from Newport and Bellefonte did not attend the meeting and their status of this requirement is unknown.

- **GH-3:** Facilities are required to be inspected annually. References GH-2, which needed to be completed last year.

- **GH-4:** Each Permittee is required to implement a standard operating procedure (SOP) for their street sweeping program.
 - Each Permittee has a street sweeping program SOP.
 - Elsmere may be eligible to receive additional credit because they are sweeping more than required. Documentation will need to be provided in order to claim additional credit.
 - Delaware City is sweeping their streets twice per year.
 - Jeff Bergstrom (City of New Castle) stated City of New Castle purchased a new sweeper, but it has not been used due to freezing temperatures.

- **GH-5:** Permittees that spray pesticides should have an SOP to minimize their use.

- **GH-6:** Each Permittee needs to provide a summary of their snow and ice program with written documentation.

- **GH-7:** Each Permittee needs a summary of their litter control program.
 - **IS-2:** Sara Esposito (DelDOT) stated that every year all Co-Permittees must request a list of their facilities from DNREC and then send it back by February 1.
 - Appendix J in the SWPP&MP provides a list of facilities that belong to each municipality.
- **TASKS DUE BY 05-07-17**
- **IDDE-1:** Co-Permittees have all developed or revised their IDDE ordinance. Ellie Mortazavi (NCC) requested the ordinance be included as an Appendix to each Annual Report.
 - **GH-2:** Checklists need to be developed for facilities, if this has not yet been completed.
 - A Notice of Intent (NOI) is required for industrial facilities.
 - SWPPPs need to be sent for approval to Bill Tanner (DNREC) and Jena Saxton (DNREC).
 - Elsmere, Delaware City and Newport have checklists but not SWPPPs.
- **TASKS DUE BY 08-07-18**
- **SMDC-2:** Permittees are required to perform a review of the current code language and adopt new ordinances or revised codes related to the Certified Construction Reviewer (CCR) basic guidelines for stormwater management during construction.
 - Elsmere and Delaware City have done this.
 - Jeff Bergstrom (City of New Castle) was unsure if this has been done.
 - Bruce Thompson (KCI) will check with Newport to see if they have met this requirement.
 - **PCSM-4:** Permittees need enforcement codes (violation notices, etc.) to deal with private and public BMPs that are not functioning as designed in post-construction.
 - Elsmere has enforcement codes in place to meet this requirement.
 - City of New Castle and Delaware City were unsure if they met this requirement.
 - **MAP-1:** Permittees need a digital map of stormwater management structures.
 - Leah Gaffney (Wilmington) sends maps to DNREC.
 - Elsmere met this requirement through David Athey (AECOM). KCI migrated this data into the DelDOT NPDES Database.
 - KCI is currently migrating City of New Castle MS4 data into the DelDOT NPDES Database. This will be done by May 2019.
 - KCI will meet with Delaware City to discuss possible options in mapping their MS4 systems.
 - Representatives from Newport and Bellefonte did not attend the meeting and their status of this requirement is unknown.

➤ **TASKS DUE BY 08-07-19**

- **WLA-3:** Permittees need to submit GIS layers for impervious surfaces.
 - Sara Esposito (DeIDOT) received confirmation from Chesapeake Bay and Delaware Bay watersheds that impervious mapping conducted using high definition aerials is sufficient for this requirement (DNREC confirmed this in 01-15-19 email). No ground-truthing of mapping is necessary because of the data's high accuracy.
 - Sara will send the link for the watershed mapping to Wilmington.
- **WPL-2, WPL-3:** The deadline is 2019 for WQIPs in the Christina River and Dragon Run watersheds.
 - DeIDOT needs to have the signed cost-share agreement signed by all Permittees by 04-05-19.
- **WWMP-2:** Implement wet weather monitoring in targeted watersheds.
 - DeIDOT is looking at pre/post stream restoration sites to determine if a difference is evident between sites. The goal is to have one document that all Permittees sign related to this requirement.

We believe that the above accurately reflects what transpired at this meeting. We appreciate comments involving a difference in understanding of what occurred. Unless we are notified in writing to the contrary within ten (10) days after receipt, we will assume that all in attendance concur with the accuracy of this transcription.

ACTION ITEMS SUMMARY
2019 Annual Phase I MS4 Co-Permittee Meeting
March 5, 2019

Topic	Action Item	Duty	Target	Completed
WQIPs	Confirm date range of impervious area restoration credit for BMPs.	DeIDOT: ES/SE	ASAP	
GRP-2: Annual Report	Submit 2018 Annual Report (Appendix C MS4 Report Form) to Ellie Mortazavi (NCC).	All Permittees	05-01-19	
MAP-1: Meeting	Meet with Delaware City to discuss mapping their MS4 systems.	KCI: BT	03-07-19	
MAP-1: Impervious Mapping	Send link for impervious mapping of Chesapeake Bay and Delaware Bay watersheds.	DeIDOT: SE	ASAP	03-05-19
WLA-3: Impervious Surfaces	Forward letter approved by DNREC for using existing high accuracy impervious surface layer.	DeIDOT: ES/SE	ASAP	
WPL-2, WPL-3	Provide information regarding obtaining credits for outfall restoration.	NCCD: AB	08-07-19	

MEETING AGENDA
2019 Annual Phase I MS4 Co-Permittee Meeting
New Castle County – Connor Building
March 5, 2019 – 9:30 AM

1. Updates

- a. Co-permittees
- b. DNREC
 - i. New Staff: Gordon Woodrow
 - ii. Audits vs inspections
 - iii. Future Permits: Public notice in April
 - iv. New Sediment and Stormwater Regulations effective February 11, 2019
- c. Reports
 - i. 2018 Annual Reports due May 1, 2019
 - ii. SWPP&MP Effectiveness Report due August 7, 2019

2. Water Quality Improvement Plans (WQIPs)

- a. WQIPs due August 7, 2019
- b. Status report of WQIP development
 - i. Process
 - ii. Concept Plans
 - iii. Credits
- c. Cost sharing agreement

3. Co-Permittee To-Do List

- a. Review Annual/Recurring Tasks Handout
 - i. Documentation needed for 2017 & 2018 Tasks
 - ii. 2019 Tasks
 - iii. Future tasks: Wet weather monitoring

4. Open Discussion

City of Delaware City
Snow & Ice
Standard Operating Procedures

General

Delaware City subcontracts out with The Cutting Edge, Inc. for the plowing and salting of the City of Delaware City Streets.

Enforcement Action

The Cutting Edge plows the City Streets after one (1) inch of snow has fallen. They apply salt to the streets as conditions require. Different events demand different applications. The amount of salt applied to the streets is speed controlled. The salt applied is measured per storm and recorded in a log at Delaware City Town Hall. All precautions are taken into consideration to alleviate pollutants from entering the storm drains and Storm Water system.

Stormwater Management - Salt Used Per Snowfall

DATE	TOTAL SALT USED	Calcium
2/17/2018	20 Tons	14 bags of Calcium
3/7/2018	16 Tons	9 bags of calcium
3/20/2018	12 Tons	12 bags of Calcium
3/21/18-3/22/18	22 Tons	14 bags of Calcium
11/15/2018	7 Tons	8 bags of Calcium
1/29/2019	4 Tons	9 bags of calcium
1/30/2019	2 Tons	5 Bags of Calcium
2/1/2019	14 Tons	11 bags of Calcium
2/10-11/19	24 Tons	16 Bags of Calcium
2/11-12/19	8 Tons	9 bags of calcium
2/21/2019	30 Tons	14 bags of Calcium
3/1/2019	20 Tons	9 bags of calcium
3/4/2019	8 tons	9 bags of calcium

"A Historic Past"



"A Bright Future"

THE CITY OF DELAWARE CITY

407 Clinton Street – P.O. Box 4159

Delaware City, Delaware 19706

Phone: 302-834-4573 Fax: 302-832-5545

City of Delaware City Street Sweeping Standard Operating Procedure

The City of Delaware City contracts out its Street Sweeping Program to Certified Seal. Currently there is eight (8) miles of road within the City. Delaware City has Certified Seal mechanically sweep two (2) times a year. Residents are notified of the days that they must remove their cars from the street so all streets can be swept curb to curb, where curbs exist, and from road edge to road edge where there is no curbing. Street Sweeping occurs over a span of two (2) days to allow for the removal of cars from the street.

There are no interstates and expressways in Delaware City. DelDOT is responsible for sweeping Fifth Street (Route 9) within the corporate limits of the City.

Debris collected will be transported to the Cutting Edge's public works yard where it will be placed in a covered dumpster. The Cutting Edge will take reasonable measures to assure that all stored street sweepings are contained on site. At appropriate times, the Cutting Edge will transport debris to a landfill operated by the Delaware Solid Waste Authority (DSWA). At this time, the weight will be determined. These records will be reported annually and maintained by the City for a period of at least five (5) years. DSWA requires a permit in order to accept municipal street sweepings. The permit needs to be renewed annually which necessitates the analysis of samples taken from the collected debris. The City of Delaware City and their contractors will adhere to DSWA requirements and renew its permit each year.

- Street Sweeping will only occur during dry weather.
- Street Sweeping will not occur during the Winter.
- Certified Seal will maintain their equipment and make sure their employees are trained properly.

The City of Delaware City contracts out to The Cutting Edge to clean the storm catch basins monthly on a rotating basis. Storm Drain Lids are removed and visual inspections are performed. Those found to have clogged drains or the accumulations of sediment are cleaned.

During the Fall months, The Cutting Edge vacuums leaves throughout the City on a weekly basis.

Street Sweeping Log

DATE	MATERIAL COLLECTED	SUBMITTED TO DELDOT	SUBMITTED TO DSWA	DUMPED AT	BY	ILLICIT DISCHARGE
7/23/2018		NA	NA	Middletown Materials, Inc.	The Cutting Edge	N/A
7/24/2018		NA	NA	Middletown Materials, Inc.	The Cutting Edge	N/A
12/11/2018		NA	NA	Middletown Materials, Inc.	The Cutting Edge	N/A
12/12/2018		NA	NA	Middletown Materials, Inc.	The Cutting Edge	N/A

Told we do not have to submit to Del Dot & DSWA any longer because we use Middletown Materials.

APRIL 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# OF CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	5	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2	5	
7th Street	Park	4		
Hamilton Street	500	2	10	
	218	1		
	214	3		
Hamilton & 3rd		6	13	
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3	17	
	100	2		
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4	19	
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3		
	212	3	25	
	124	1		
	116	2		
Delaware Street		2	26	
Washington Street	unit block	10		
	232	1	30	
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3	26	
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5	30	
Madison	211	2		
	209	2		
	207	3		
Monroe Street	300 Block	7	↓	
Monroe St. Out Fall		2		

MAY 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	2	
	125	2		
Reybold Drive	138	2	↓	
	120	2		
	12	2		
	8	2		
7th Street	Park	4	4	
Hamilton Street	500	2	↓	
	216	1		
	214	3		
Hamilton & 3rd		6	7	
Hamilton & 2nd		4	↓	
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2		
	428	1	10	
Bayard & 3rd		4	↓	
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1	15	
Canal & Front		3	↓	
	212	3		
	124	1		
	116	2		
Delaware Street		2	17	
Washington Street	unit block	10	↓	
	232	1		
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5	↓	
Adams & Henry		3		
Jefferson Street	212	1	22	
Jefferson & 3rd		5	↓	
Madison & 3rd		5		
Madison	211	2	25	
	209	2	↓	
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2	36	

June 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	5	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2		
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6		
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2		
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3		
	212	3		
	124	1		
	116	2		
Delaware Street		2		
Washington Street	unit block	10		
	232	1		
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2		
	209	2		
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

July 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	3	
	125	2		
Reybold Drive	138	2	5	
	120	2		
	12	2		
	8	2		
7th Street	Park	4	10	
Hamilton Street	500	2		
	218	1		
	214	3	12	
Hamilton & 3rd		6		
Hamilton & 2nd		4	17	
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3	19	
	100	2		
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4	24	
Canal Street	Rear of School	1		
Canal & 4th		1	26	
Canal & 3rd		1		
Canal & Front		3		
	212	3		
	124	1	29	
	116	2		
Delaware Street		2	29	
Washington Street	unit block	10		
	232	1	26	
Washington & Front		3		
Washington & 3rd		4	26	
Adams & 3rd		5		
Adams & Henry		3	26	
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2	26	
	209	2		
	207	3		
Monroe Street	300 Block	7	26	
Monroe St. Out Fall		2		

Aug 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	2	
	125	2		
Raybold Drive	138	2		
	120	2		
	12	2		
	8	2	7	
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6	9	
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2	14	
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4	16	
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3	21	
	212	3		
	124	1		
	116	2		
Delaware Street		2		
Washington Street	unit block	10		
	232	1	24	
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1	28	
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2		
	209	2		
	207	3	30	
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

September 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	4	
	125	2		
Raybold Drive	138	2		
	120	2		
	12	2		
	8	2	6	
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6	11	
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2	14	
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1	18	
Canal & 3rd		1		
Canal & Front		3		
	212	3		
	124	1		
	116	2	21	
Delaware Street		2		
Washington Street	unit block	10		
	232	1		
Washington & Front		3		
Washington & 3rd		4	25	
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5	28	
Madison	211	2		
	209	2		
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

Oct 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASNS	DATE SERVICED	LID PULLED
Wartel Drive	135	2	3	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2	4	
	8	2		
7th Street	Park	4	7	
Hamilton Street	500	2		
	218	1		
	214	3	9	
Hamilton & 3rd		6		
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10	11	
	Park	3		
	100	2		
	428	1		
Bayard & 3rd		4	16	
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1	18	
Canal & Front		3		
	212	3		
	124	1		
	116	2	23	
Delaware Street		2		
Washington Street	unit block	10	25	
	232	1		
Washington & Front		3	28	
Washington & 3rd		4		
Adams & 3rd		5	25	
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5	25	
Madison	211	2		
	209	2		
	207	3	30	
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

NOV 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	1	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2		
7th Street	Park	4	6	
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6		
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10	8	
	Park	3		
	100	2		
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1	13	
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3		
	212	3	15	
	124	1		
	116	2		
Delaware Street		2		
Washington Street	unit block	10	18	
	232	1		
Washington & Front		3	20	
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1	20	
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2		
	209	2	27	
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

Dec 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASNS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	4	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2	6	
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6	11	
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2	13	
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1	18	
Canal & 3rd		1		
Canal & Front		3		
	212	3		
	124	1		
	116	2	21	
Delaware Street		2		
Washington Street	unit block	10		
	232	1		
Washington & Front		3		
Washington & 3rd		4	25	
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5	27	
Madison & 3rd		5		
Madison	211	2		
	208	2		
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

Jan 2019

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	2	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2		
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3		
Hamilton & 3rd		6		
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2		
	428	1		
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3		
	212	3		
	124	1		
	116	2		
Delaware Street		2		
Washington Street	unit block	10		
	232	1		
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2		
	209	2		
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

Feb 2018

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASNS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	4	
	125	2		
Reybold Drive	136	2		
	120	2		
	12	2		
	8	2	7	
7th Street	Park	4		
Hamilton Street	500	2		
	218	1		
	214	3	12	
Hamilton & 3rd		6		
Hamilton & 2nd		4		
Hamilton & Williams		2		
Clinton Street	unit block	10	14	
	Park	3		
	100	2		
	428	1		
Bayard & 3rd		4	19	
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1	21	
Canal & Front		3		
	212	3		
	124	1		
	116	2		
Delaware Street		2	25	
Washington Street	unit block	10		
	232	1		
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5	27	
Adams & Henry		3		
Jefferson Street	212	1		
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2	28	
	209	2		
	207	3		
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		

March 2019

STORM DRAIN MAINTENANCE LOG

STREET NAME	LOCATION	# of CATCH BASINS	DATE SERVICED	LID PULLED
Warfel Drive	135	2	5	
	125	2		
Reybold Drive	138	2		
	120	2		
	12	2		
	8	2		
7th Street	Park	4	7	
Hamilton Street	500	2		
	21B	1		
	214	3		
Hamilton & 3rd		6		
Hamilton & 2nd		4	12	
Hamilton & Williams		2		
Clinton Street	unit block	10		
	Park	3		
	100	2		
	428	1	14	
Bayard & 3rd		4		
Bayard & Canal		4		
Canal Street	Rear of School	1		
Canal & 4th		1		
Canal & 3rd		1		
Canal & Front		3	19	
	212	3		
	124	1		
	118	2		
Delaware Street		2		
Washington Street	unit block	10	21	
	232	1		
Washington & Front		3		
Washington & 3rd		4		
Adams & 3rd		5		
Adams & Henry		3		
Jefferson Street	212	1	28	
Jefferson & 3rd		5		
Madison & 3rd		5		
Madison	211	2		
	209	2		
	207	3	21	
Monroe Street	300 Block	7		
Monroe St. Out Fall		2		