RUTGERS UNIVERSITY
Water Resources Program
New Jersey Agricultural Experiment Station

Hamilton Township (Mercer County)

ILLICIT DISCHARGE INVESTIGATION 2025

Developed by the Rutgers Cooperative Extension Water Resources Program
Funded by Hamilton Township, Mercer County, New Jersey

October 29, 2025

Acknowledgements

The Hamilton Township (Mercer County) Illicit Discharge Investigation 2025 has been produced by the **Rutgers Cooperative Extension (RCE) Water Resources Program**.

Funding for this project was generously provided by the **Township of Hamilton, Mercer County, New Jersey** and in part by the **New Jersey Agricultural Experiment Station** through the United States Department of Agriculture.

Contents

Introduction

The Rutgers Cooperative Extension (RCE) Water Resources Program collected samples from twelve outfall sites in Hamilton Township, Mercer County, New Jersey in August 2025 that exhibited dry weather flow. These twelve outfall sites were part of a larger group of 27 outfalls that were identified as being potential illicit discharges based on visual inspections conducted during the regular outfall inspections of Region 4 (the Back Creek subwatershed, the Crosswicks Creek subwatershed, and the Doctors Creek subwatershed) during the summer of 2025 (Figures 1-4). These outfalls all had dry weather flow or other potential signs of illicit discharges. Data from the initial inspections are provided in Attachment 1.

Sampling

Out of the 27 outfalls suspected of illicit discharge, 16 were revisited and reinspected for evidence of illicit discharge on August 27 and 28 in 2025. Twelve of the 16 outfalls were observed to be flowing, and the remaining four were no longer flowing. These four outfalls showed no other evidence of illicit discharge at the time of re-inspection. Thus, it was assumed these outfalls were originally flowing due to groundwater sources, but special attention should be given to these outfalls at their next inspection. The standard forms required by the New Jersey Department of Environmental Protection (NJDEP) have been completed for all sixteen outfalls that were re-inspected (See Attachment 2).

For the twelve outfalls found to be flowing on August 27 and 28, grab samples were collected by the RCE Water Resources Program staff and delivered to Pace Analytical Labs in Ewing, NJ for analysis of methylene blue active substances (MBAS, surfactants), ammonia as N, potassium, and fluoride to determine if the sites were characteristic of an illicit discharge. The temperature and approximate flow rate of the water directly leaving the outfall were also measured. The results of these analyses as well as the calculated ammonia to potassium ratio, can be found in Table 1. The following analytical methods were used by the lab: MBAS (SM 5540 C-11), ammonia as N (EPA 350.1), potassium (EPA 300.0 Rev. 2.1), and fluoride (EPA 200.7 Rev 4.4).

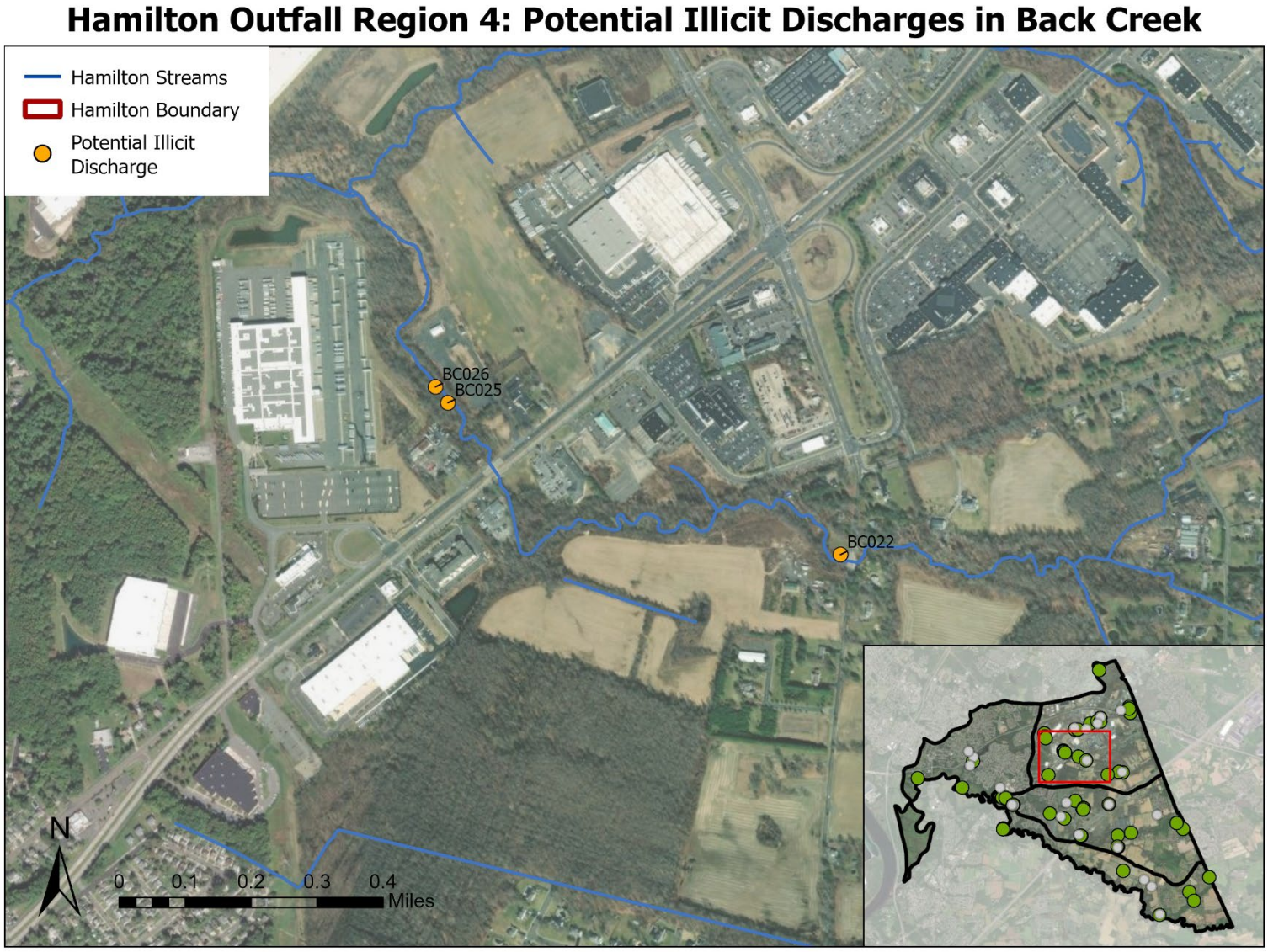

Figure 1: Hamilton Township outfall sampling sites Region 4 (Back Creek), August 2025

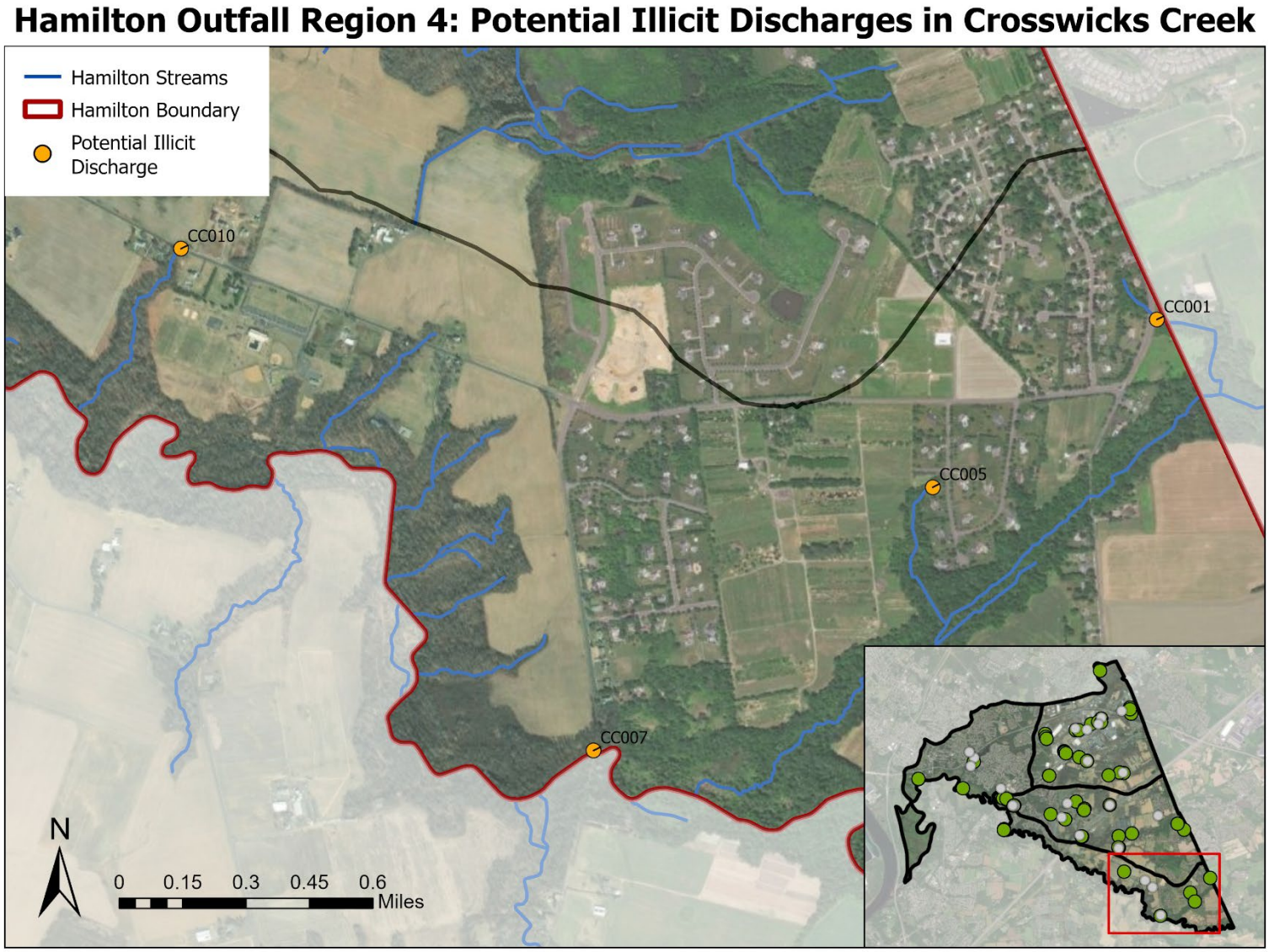

Figure 2: Hamilton Township outfall sampling sites Region 4 (Crosswicks Creek), August 2025

Hamilton Outfall Region 4: Potential Illicit Discharges in Doctors Creek

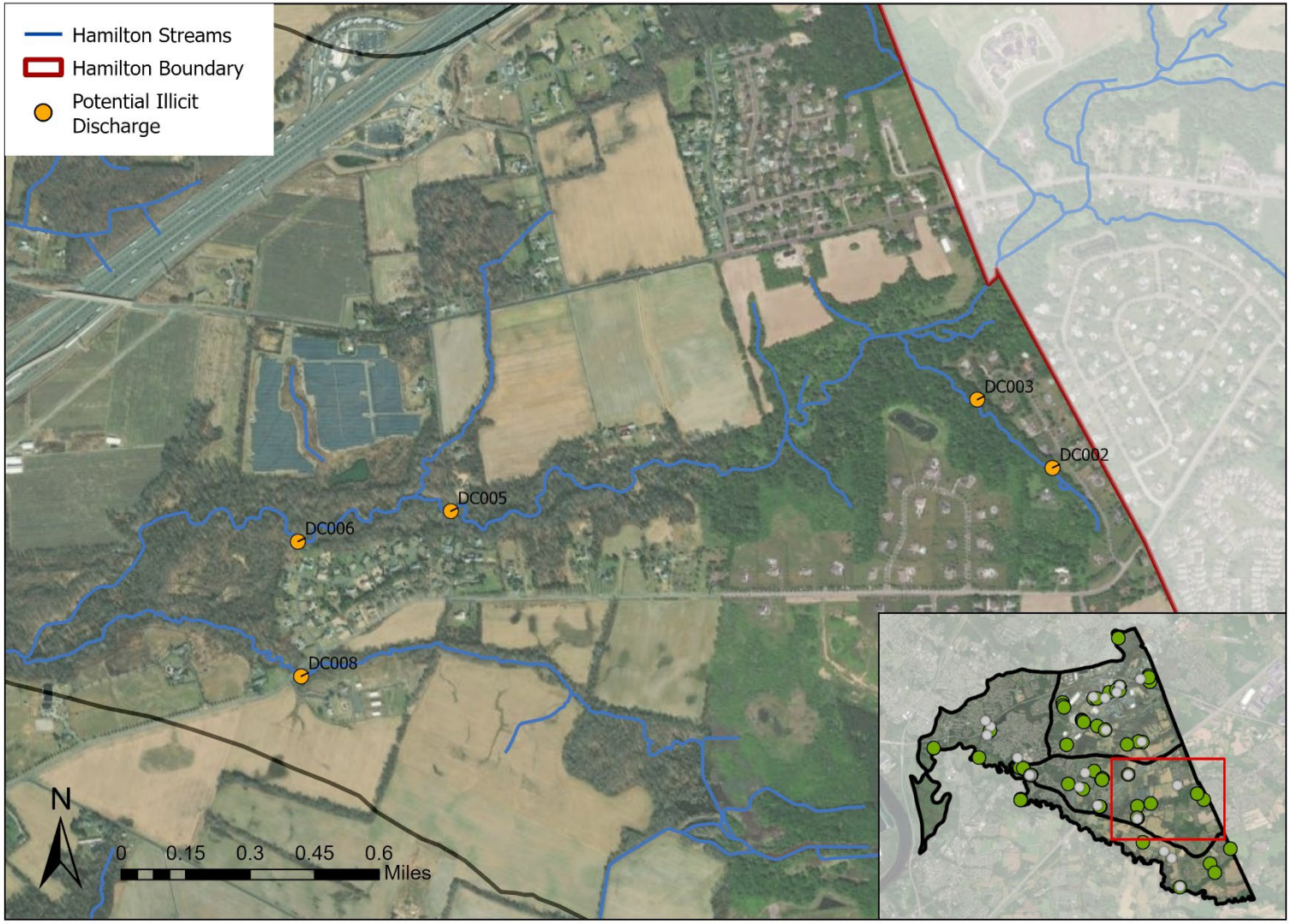

Figure 3: Hamilton Township outfall sampling sites Region 4 (Doctors Creek), August 2025

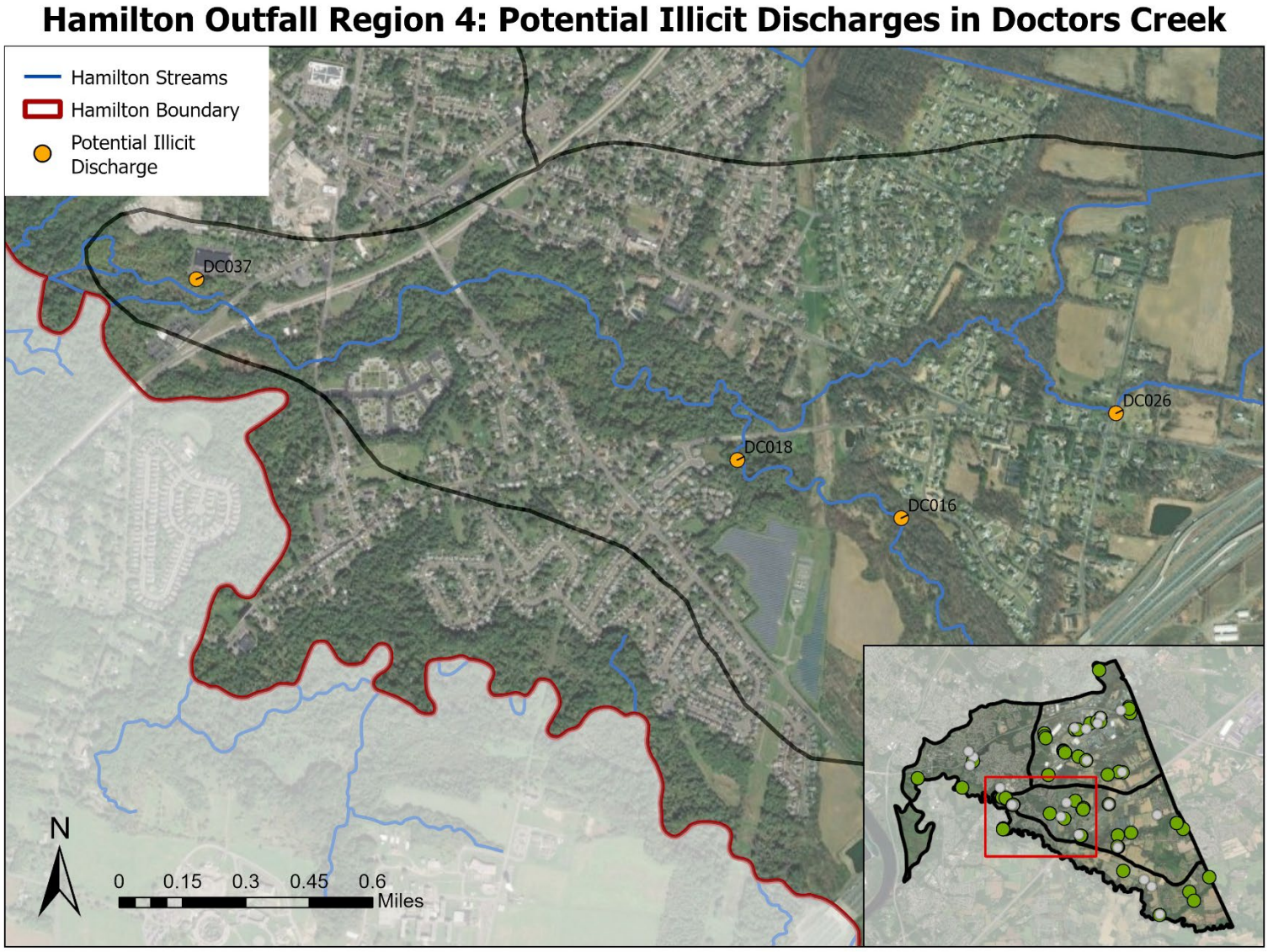

Figure 4: Hamilton Township outfall sampling sites Region 4 (Doctors Creek), August 2025

Table 1: Results from outfall sampling

New Outfall ID	Old Outfall ID	Sample Date	Time Sampled	Temperature (°F)	Surfactants (MBAS) (mg/L)	Ammonia as N (mg/L)	Potassium (mg/L)	Ratio NH_3:K	Fluoride (mg/L)	Estimated Flow Rate GPM	Illicit Discharge (Y/N)
BC022	C603	8/28/2025	2:10 PM	66.6	ND	ND	ND	0.10	ND	0.038	N
BC026	C601	8/27/2025	10:20 AM	70.2	ND	0.622	4.19	0.15	0.248	0.080	Y
CC001	A802	8/27/2025	1:44 PM	64.0	ND	ND	ND	0.10	ND	6.960	N
CC005	B801	8/27/2025	2:16 PM	67.4	ND	ND	ND	0.10	ND	0.010	N
CC007	26	8/28/2025	10:00 AM	67.4	ND	ND	ND	0.10	ND	5.000	N
CC010	29	8/28/2025	1:20 PM	68.6	ND	ND	ND	0.10	ND	0.530	N
DC002	A701	8/27/2025	12:11 PM	66.8	ND	ND	ND	0.10	ND	2.800	N
DC003	A702	8/27/2025	11:53 AM	59.5	ND	ND	ND	0.10	ND	0.272	N
DC006	C704	8/27/2025	11:13 AM	67.8	ND	ND	5.37	0.04	ND	8.920	N
DC016	N/A	8/28/2025	10:45 AM	65.2	ND	ND	ND	0.10	ND	3.100	N
DC018	50	8/28/2025	11:11 AM	61.0	ND	ND	ND	0.10	ND	0.100	N
DC037	E604	8/28/2025	12:50 PM	69.7	ND	ND	26.8	0.01	0.244	0.070	Y
BC025	C602	Not Sampled		N/A							
DC005	B701	Not Sampled		N/A							
DC008	35	Not Sampled		N/A							
DC026	N/A	Not Sampled		N/A							

ND = not detected

MBAS = methylene blue active substances

Results

The Illicit Discharge Identification Flow Chart provided by NJDEP in chapter 3.6 of the Municipal Separate Storm Sewer System Tier A Guidance Document (Figure 5) was used to determine the presence of an illicit discharge. As seen from the results in Table 1, none of the samples had detectible surfactant concentrations.

If surfactants are measured, the ratio of ammonia as N to potassium can be used to distinguish a sanitary wastewater source from a sanitary washwater source. The ammonia as N to potassium ratio of sanitary wastewater is characteristically greater than 1.0. Dry weather flows with an ammonia as N to potassium ratio less than 1.0 are likely to be from a sanitary washwater source (NJDEP, 2018). If ammonia as N and/or potassium were reported as not detected (ND), half the reporting detection limit (RDL) was used to calculate the ratio. In the case of all outfalls sampled this year, no surfactants were detected, illustrating that the dry weather flows observed are most likely not from a sanitary wastewater or a sanitary washwater source.

For those discharges where surfactants are not detected, the next part of the investigation is to determine if the temperature of the discharge is above 70°F. Discharges where surfactants are not detected and with temperatures greater than 70°F are suspected to be from cooling water sources. The sample taken from outfall BC026 had a temperature of 70.2 °F, which could be indicative of a potential illicit discharge of cooling water. Outfall BC026 has a predominantly industrial and commercial drainage area, with a FedEx warehouse to the west and a commercial building to the east that are potential sources of cooling water.

Most industrial discharges can be identified by high potassium concentrations and/or high ammonia as N concentrations. The benchmark concentration for potassium to identify industrial discharges is ≥ 20 mg/L, and the benchmark concentration for ammonia as N to identify industrial discharges is ≥ 50 mg/L (Brown, Caraco, and Pitt, 2004). All potassium and ammonia as N concentrations reported in Table 1 are well below these benchmark concentrations, except for Outfall DC037. The potassium concentration at this location is 26.8 mg/L, suggesting a possible industrial source of dry weather flow. The warehouse immediately north of the outfall is a potential source of this suspected illicit discharge.

Dry weather flows observed at the remaining ten outfalls investigated are more likely from a natural or irrigation water source. No evidence of illicit discharge was detected at these ten outfalls.

The data indicate that there is reason to suspect illicit discharges at two of the outfalls: BC026 for suspected illicit discharge of cooling water and DC037 for suspected industrial illicit discharge. Further investigation to find the sources of the suspected illicit discharges is required.

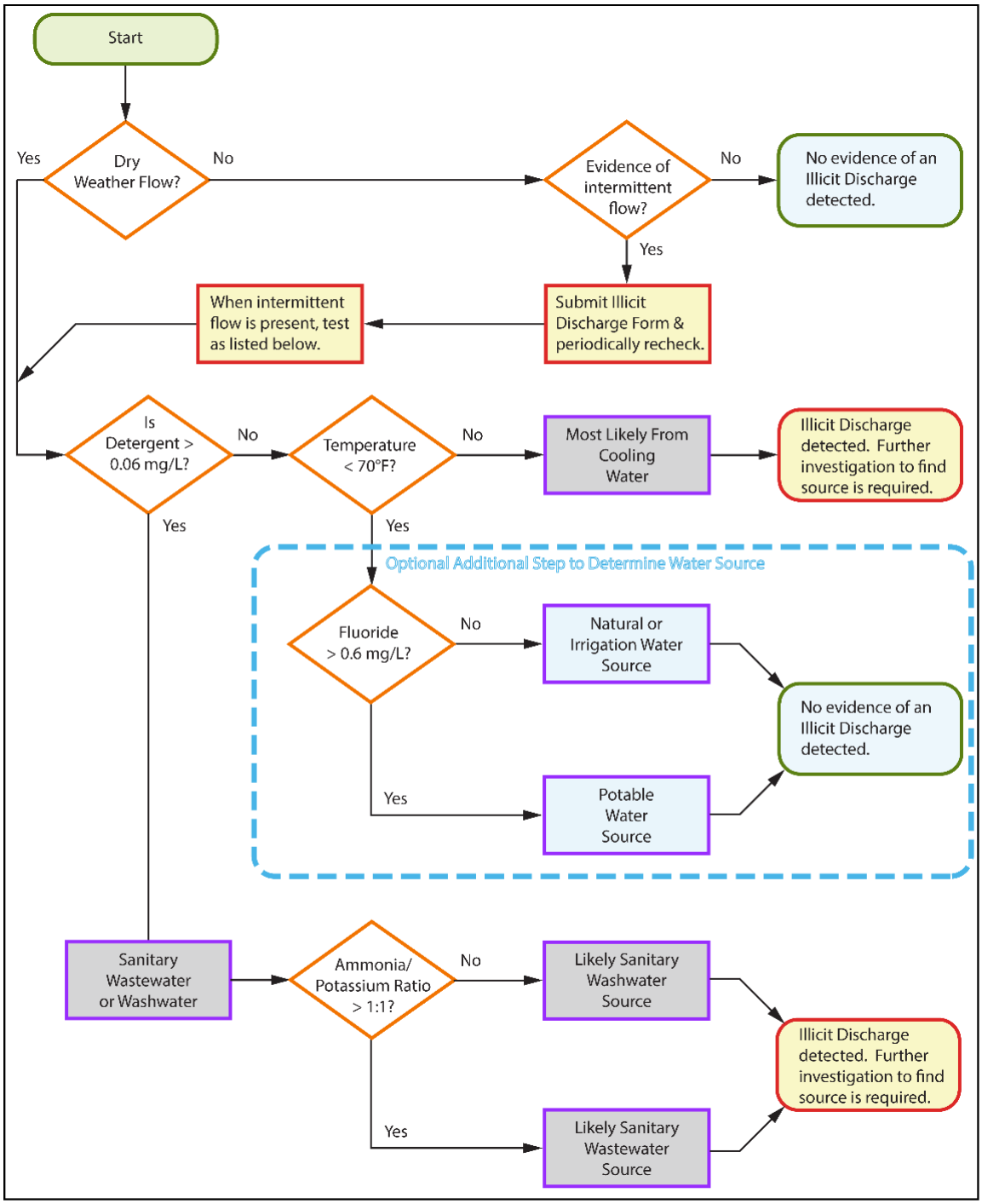

Figure 5: Illicit discharge identification flow chart, NJDEP 2018

References

Brown, E., Caraco, D., Pitt, R. 2004. Illicit Discharge Detection and Elimination: A Guidance Manual: Chapter 12 Indicator Monitoring, pp. 134-135.

New Jersey Department of Environmental Protection (NJDEP). 2018. Tier A Municipal Stormwater Guidance Document. Chapter 3.6: MS4 Outfall Pipe Mapping and Illicit Discharge and Scour Detection Control, pp. 6-12.

Weather Underground, Trenton Mercer Airport Station, 40.23 ºN, 74.68 ºW, August 22, 2023. https://www.wunderground.com/history/daily/us/nj/ewing/KTTN/date/2023-8-22

Attachment 1: Initial Inspection Table

Outfall ID	OLD ID	Subwatershed	Date of Inspection	Is the pipe fully or partially submerged?	Are there known non-stormwater discharges?	Rainfall Last 72hrs?	Dry Weather Flow?	Illicit Discharge Suspected?	Odor	Color	Turbidity	Floatables	Deposits or Stains	Adjacent Vegetation (compared to other areas)	Notes	Overall Priority
BC004	A507	Back Creek (above Yardville-H Sq Road)	7/24/2025	N	Unknown	N	Y	Y	None	Other	Cloudy	None	None	normal	No dry weather flow during inspection but evidence of previous illicit discharge	4 - High
BC022	C603	Back Creek (above Yardville-H Sq Road)	7/25/2025	N	Unknown	N	Y	Y	None	Clear	Clear	None	None	normal		2 - Low
BC023	19	Back Creek (above Yardville-H Sq Road)	7/31/2025	Y (Partially Submerged)	Unknown	N	Y	Y	None	Brown	Cloudy	Petroleum	None	normal		3 - Medium
BC025	C602	Back Creek (above Yardville-H Sq Road)	7/24/2025	N	Unknown	N	Y	Y	Petroleum/Gas	Red	Cloudy	None	Oily residues	excessive gowth or algal growth		4 - High
BC026	C601	Back Creek (above Yardville-H Sq Road)	7/24/2025	N	Unknown	N	Y	Y	Petroleum/Gas	Red	Cloudy	None	Excessive sediments	normal		4 - High
BC027	C515	Back Creek (above Yardville-H Sq Road)	7/24/2025	N	Unknown	N	Y	Y	None		Clear	None	None	normal		2 - Low
CC001	A802	Crosswicks Ck(Ellisdale trib - Walnford)	8/5/2025	N	Unknown	N	Y	Y	None	Clear	Clear	Suds	None	normal		2 - Low
CC003		Crosswicks Ck(Ellisdale trib - Walnford)	8/5/2025	Y (Partially Submerged)	Unknown	N	Y	Y	None	Clear	Clear	None	Grayish-Black	normal		3 - Medium
CC005	B801	Crosswicks Ck(Ellisdale trib - Walnford)	8/5/2025	Y (Partially Submerged)	Unknown	N	Y	Y	None	Clear	Clear	None	None	normal		2 - Low
CC007	26	Crosswicks Ck(Ellisdale trib - Walnford)	8/5/2025	N	Unknown	N	Y	Y	None	Clear	Clear	None	Grayish-Black	normal		3 - Medium
CC010	29	Crosswicks Ck(Doctors Ck-Ellisdale trib)	8/5/2025	Y (Partially Submerged)	Unknown	N	Y	Y	None	Clear	Clear	None	Grayish-Black	normal		2 - Low
DC002	A701	Doctors Creek (below Allentown)	8/5/2025	N	Unknown	N	Y	Y	None	Brown	Clear	None	Excessive sediments	normal		3 - Medium
DC003	A702	Doctors Creek (below Allentown)	8/5/2025	N	Unknown	N	Y	Y	None	Clear	Clear	Petroleum	Grayish-Black	normal		2 - Low
DC005	B701	Doctors Creek (below Allentown)	7/31/2025	N	Unknown	N	Y	Y	None	Brown	Cloudy		None	normal		2 - Low
DC006	C704	Doctors Creek (below Allentown)	7/31/2025	N	Unknown	N	Y	Y	None	Clear	Cloudy	None	None	normal		3 - Medium
DC008	35	Doctors Creek (below Allentown)	8/6/2025	N	Unknown	N	Y	Y	None	Brown	Clear	None	None	normal		2 - Low
DC013	41	Doctors Creek (below Allentown)	7/25/2025	N	Unknown	N	Y	Y	Sewage	Yellow	Cloudy		Grayish-Black	excessive gowth or algal growth	Dead deer next to outfall so we could not get too close	3 - Medium
DC014	42	Doctors Creek (below Allentown)	7/25/2025	N	Unknown	N	Y	Y	None	Yellow	Clear	None	Excessive sediments	normal	Under overpass	2 - Low
DC016		Doctors Creek (below Allentown)	7/7/2025	N	Unknown	N	Y	Y	None	Clear	Cloudy	None	Oily residues	normal		2 - Low
DC018	50	Doctors Creek (below Allentown)	7/7/2025	N	Unknown	N	Y	Y	None	Clear	Clear	None	None	normal		3 - Medium
DC026		Doctors Creek (below Allentown)	7/25/2025	N	Unknown	N	Y	Y	None	Yellow	Clear	Suds	Excessive sediments	normal	Orange discharge from pipe	2 - Low
DC037	E604	Doctors Creek (below Allentown)	7/25/2025	N	Unknown	N	Y	Y	None	Brown	Cloudy	None	Other	normal		3 - Medium
BC002	A505	Back Creek (above Yardville-H Sq Road)	7/24/2025	Y (Partially Submerged)	Unknown	N	N	Unsure	None	Gray	Cloudy	None	None	normal	No dry weather flow during inspection but evidence of previous illicit discharge	3 - Medium
BC003	A501	Back Creek (above Yardville-H Sq Road)	7/24/2025	Y (Partially Submerged)	Unknown	N	N	Unsure	None	Yellow	Cloudy	None	None	normal	No dry weather flow during inspection but evidence of previous illicit discharge	2 - Low
BC014	C526	Back Creek (above Yardville-H Sq Road)	7/24/2025	Y (Partially Submerged)	Unknown	N	N	Unsure	None	Yellow	Clear	Suds	None	excessive gowth or algal growth	No dry weather flow during inspection but evidence of previous illicit discharge	2 - Low
BC028	C520	Back Creek (above Yardville-H Sq Road)	7/24/2025	Y (Partially Submerged)	Unknown	N	N	Unsure	None	Yellow	Clear	None	None	inhibited growth	2 outfalls present in same spot, one is 16 in diam,other is 18. No dry weather flow during inspection but evidence of previous illicit discharge	3 - Medium
BC029	C516	Back Creek (above Yardville-H Sq Road)	7/24/2025	Y (Partially Submerged)	Unknown	N	N	Unsure	None	Yellow	Opaque	Petroleum	None	normal	No dry weather flow during inspection but evidence of previous illicit discharge	4 - High

Attachment 2: 2025 Illicit Connection Visual Inspection Reports

Outfall ID: BC022 (7/25/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ▣ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ▣ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 25 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ▣ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: BC025 (7/24/2025)

Illicit Connection Inspection Report Form

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It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

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SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: BC026 (7/24/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 25 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: CC001 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 25 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: CC005 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 05 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: CC007 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 05 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: PS024 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 05 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC002 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 05 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC003 (8/5/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 05 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC005 (7/31/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 31 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC006 (7/31/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 31 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC008 (8/6/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 06 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC016 (7/7/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 07 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC018 (7/7/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 02 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

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Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

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SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
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Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC026 (6/18/2024)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 25 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable:

07/25/2025: Suspicious properties identified, added to list for sampling
08/22/2017

SECTION 4: PHYSICAL OBSERVATIONS

If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
Vegetation	*As compared to surrounding Riparian bank and/or stream vegetation* ☒ Normal ☐ Excessive growth and/or algal presence (Food processing plants) ☐ Inhibited Growth (Industrial operation effluent, CAFOs)

**If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.*

*Prior to conducting the analyses in Sections 5 & 6, the source may be traced back upstream in the storm sewer to a more definitive location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.**

SECTION 5: FIELD MONITORING

Field calibrate instruments in accordance with manufacturer's instructions prior to testing.

Estimated Dry Weather Flow Rate	The Tier A guidance document recommends taking the estimate flow rate during the physical observations. 0.038 GPM
Detergents Examples include surfactants and methylene blue active substances (MBAS)	Potential discharge types include sewage, washwater, industrial or commercial liquid waste Measurement: ND - Not Detected mg/L
Temperature of dry weather discharge	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement: 66.6 °F

Proceed to Section 6 in accordance with the Guidance Document recommendations.

SECTION 6: DRY WEATHER FLOW ANALYSIS - WATER QUALITY

** Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, further testing must be conducted using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document* (https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf).

Indicate the location of your measurements (e.g. outfall, manhole number, etc.): _____

Outfall

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	ND - Not Detected mg/L
Potassium	Sewage, industrial or commercial liquid waste	ND - Not Detected mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	ND - Not Detected mg/L
pH of Dry Weather Discharge	Washwater	SU

**The abbreviations FW, PL, SC, SE 1, SE2, and SE3 refer to the surface water quality classification of the receiving surface waterbody where the outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwater, PL=Pinelands, SC=Saline Coastal, SE=Saline Estuary. Map coverage of these classifications is available on NJ-GeoWeb (https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d) using the layer under 'Water' of 'Surface Water Quality Classification.'

SECTION 7: ILLICIT DISCHARGE INVESTIGATION

The investigation is not complete until the source of the dry weather flow is found, and any illicit discharge is eliminated.

Based on the latest results from the investigation, including the results in Sections 4, 5 and 6, is/was this dry weather flow from an illicit connection? ☐ YES ☐ NO ☐ INVESTIGATION IS ONGOING

If the investigation has been completed, what was the source of the dry weather flow or illicit connection?

The source of the dry weather flow is natural or irrigation water, no evidence of illicit discharge detected.

Describe the investigation, including the methods that were/will be used to identify the suspected source of the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the investigation. Attach additional pages if necessary.

Samples were collected from this outfall on 8/28/2025 and tested for the following parameters: surfactants, potassium, ammonia, and fluoride. None of these parameters were indicative of illicit discharge sources.

SECTION 8: ILLICIT DISCHARGE ELIMINATION

If it was an illicit discharge, has the source been eliminated? ☐ YES ☐ NO

Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it took/will take, and how removal was/will be confirmed and rechecked: _____

SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025

Outfall ID: DC037 (7/25/2025)

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the Tier A Guidance Document.

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION

MS4 Permittee: Hamilton Township NJPDES #: NJG0 150258

SECTION 2: OUTFALL SUMMARY INFORMATION

If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.

Outfall ID: BC022 (previously C603) Outfall Location Description: 3901 Crosswicks Hamilton Square Road

Municipality: Hamilton Township County: Mercer

Receiving Waterbody: Back Creek

Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):

24" diameter concrete pipe

If the ultimate discharge into the receiving water **is from an enclosed pipe**, is the end of the pipe fully or partially submerged? ☐ NEVER ☒ SOMETIMES* ☐ ALWAYS*

*If 'Sometimes' or 'Always,' describe submerged condition at time of inspection:

Wide, slow flow pooling around the outfall

If the ultimate discharge into the receiving water **is not from an enclosed pipe**, what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft.): N/A

Do any other NJPDES permittees discharge through this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN

*If 'YES', list Permittee Name(s), NJPDES #(s), and Location of Connection:

N/A

If 'YES', please contact your MS4 Case Manager.

SECTION 3: OUTFALL INSPECTION

Date of current inspection: 08 / 28 / 2025

Latest precipitation/snowmelt event: 08 / 20 / 2025 Amount of Precipitation (in.): 0.78

Date dry weather flow or other evidence of an intermittent illicit discharge was first discovered: 07 / 25 / 25

List the date(s) of previous inspection(s) and describe the actions taken, if applicable: 07/25/2025: Suspicious properties identified, added to list for sampling
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If the outfall is either partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.

If applicable: *Manhole ID:* N/A *Approximate distance upstream from outfall (ft.):* N/A

The permittee shall use the table below to describe 1) the observed dry weather flow and/or 2) when there are indications of intermittent illicit discharges present.

(Potential illicit discharge sources are listed in parentheses.)

Odor	☒ None ☐ Sewage (stale/septic sanitary wastewater) ☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum product storage) ☐ Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.) ☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.) ☐ Other: _____
Color	☒ Clear ☐ Brown (meat packers, printing plants, metal works, concrete or stone operations, fertilizer facilities, and petroleum refining facilities) ☐ Gray (dairies, sewage) ☐ Yellow (chemical plants, textile and tanning plants) ☐ Red (meat packers) ☐ Other: _____
Turbidity	☒ Clear ☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and automotive dealers) ☐ Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable Matter (Does not include litter)	*Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter, toilet paper, sanitary napkins, and condoms.* ☒ None ☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other: _____

Deposits and Stains within outfall	*Coatings, residues or fragments of material may be indicators of a potential intermittent non-stormwater discharge* ☐ None ☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers) ☒ Excessive sediments (construction sites) ☐ Oily residues (petroleum refineries, storage facilities, vehicle service areas) ☐ Other:_____
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Chlorine	Industrial or commercial liquid waste	mg/L
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Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
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pH of Dry Weather Discharge	Washwater	SU

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SECTION 9: INSPECTOR INFORMATION

Inspector's Name: Payal Khatri

Title: PROGRAM ASSOCIATE Affiliation: RCE WATER RESOURCES PROGRAM

Signature: Payal Khatri Date: 10/29/2025