

APPENDIX I
INSPECTION
FORMS

Illicit Connection Inspection Report Form

Highway Agency
Information

Highway Agency: _____

NJPDES # :NJG_____PI ID #: _____

Team Member: _____

Date:_____ Effective Date of Permit Authorization (EDPA):_____

Outfall #: _____ Location: _____

Receiving Waterbody: _____

1. Is there a dry weather flow? Y () N ()
2. If "YES", what is the outfall flow estimate? _____ gpm
(flow sample should be kept for further testing, and this form will need to be submitted with the Annual Report and Certification)
3. Are there any indications of an intermittent flow? Y () N ()
4. If you answered "**NO**" to BOTH question #1 and #3, there is probably not an illicit connection and you can skip to question #7.
(NOTE: This form **does not** need to be submitted to the Department, but should be kept with your SPPP.)

If you answered "**YES**" to either question, please continue on to question #5.

(NOTE: This form will need to be submitted to the Department with the Annual Report and Certification.)

5. PHYSICAL OBSERVATIONS:

(a) **ODOR:** none sewage sulfide oil gas rancid/sour other: _____

(b) **COLOR:** none yellow brown green red gray other: _____

(c) **TURBIDITY:** none cloudy opaque

(d) **FLOATABLES:** none petroleum sheen sewage other: _____

(e) **DEPOSITS/STAINS:** none sediment oily other: _____

(f) **VEGETATION CONDITIONS:** normal excessive growth inhibited growth

(g) DAMAGE TO OUTFALL STRUCTURES:

IDENTIFY STRUCTURE: _____

DAMAGE: none concrete spalling/cracking peeling paint

metal corrosion other damage: _____

6. ANALYSES OF OUTFALL FLOW SAMPLE:

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

(a) **DETERGENTS:** _____ mg/L

(if sample is greater than 0.06 mg/L, the sample is contaminated with detergents [which may be from sanitary wastewater or other sources]. Further testing is required and this outfall should be given the highest priority.)

(if the sample is not greater than 0.06 mg/L and it does not show physical characteristics of sanitary wastewater [e.g., odor, floatables, and/or color] it is unlikely that it is from sanitary wastewater sources, yet there may still be an illicit connection of industrial wastewater, rinse water, backwash or cooling water.

Skip to question #6c.)

(b) **AMMONIA (as N) TO POTASSIUM RATIO:** _____

(if the Ammonia to Potassium Ratio is greater than 0.6:1, then it is likely that the pollutant is sanitary sewage)

(if the Ammonia to Potassium Ratio is less than or equal to 0.06:1, then the pollutant is from another wastewater source.)

(c) **FLUORIDE:** _____ mg/L

(if the fluoride levels are between 1.0 and 2.5 mg/L, then the flow is most likely from fluoride treated potable water.)

(if the sample tests below a detection limit of 0.1 mg/L for fluoride, it is likely to be from groundwater infiltration, springs or streams. In some cases, however, it is possible that the discharge could originate from an onsite well used for industrial cooling water which will test non-detect for both detergents and fluoride. To differentiate between these cooling water discharges and ground water infiltration, you will have to rely on temperature.)

(d) **TEMPERATURE:** _____ °F

(if the temperature of the sample is over 70°F, it is most likely cooling water)

(if the temperature of the sample is under 70°F, it is most likely from ground water infiltration)

7. Is there a suspected illicit connection? Y () N ()

If "**YES**", what is the suspected source? _____

If "**NO**", skip to signature block on the bottom of this page.

8. Has the investigation of the suspected illicit connection been completed?

Y () N ()

If "**YES**", proceed to question #9.

If "**NO**", skip to signature block on the bottom of this page.

9. Was the source of the illicit connection found? Y () N ()

If "**YES**", identify the source (including whether source is from Highway Agency or another entity). _____

What plan of action will follow to eliminate the illicit connection or report the illicit connection to the NJDEP?

Resolution: _____

If "**NO**", complete the Closeout Investigation Form and attach it to this Illicit Connection Inspection Report Form.

Inspector's Name: _____

Title: _____

Signature: _____

Date: _____

If there is a dry weather flow or evidence of an intermittent flow, be sure to include this form with your Annual Report and Certification.

Closeout Investigation Form

Highway Agency
Information

Highway Agency: _____

NJPDES # :NJG _____ PI ID #: _____

Team Member: _____

Date: _____ Effective Date of Permit Authorization (EDPA): _____

Outfall #: _____ Location: _____

Receiving Waterbody: _____

Basis for Submittal:

- A non-stormwater discharge was found, but no source was located within six months.
- An intermittent non-stormwater discharge was observed, and three unsuccessful investigations were conducted to investigate the discharge while it was flowing.
- An illicit connection was found to emanate from an entity other than the Highway Agency.

Describe each phase of your investigation, including dates. Attach additional pages as necessary:

Inspector's Name: _____

Title: _____

Signature: _____

Date: _____

Complete and attach this form to the appropriate Illicit Connection Inspection Report Form and submit with the annual certification.

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency
Information

Highway Agency: _____
 NJPDES # : NJG _____ PI ID #: _____
 Team Member: _____
 Date: _____ Effective Date of Permit Authorization (EDPA): _____

1. Location of Project

- a. Project Name _____
- b. Highway Agency Project Number (if applicable): _____
- c. Road Name(s) (if applicable): _____
- d. Municipality(ies): _____
- e. County(ies): _____

2. Description (type of project)

- a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): _____
- b. Area of proposed disturbance: _____ acres (include disturbance for easements, on/off ramps, etc. that are part of the project)
- c. Area of proposed additional impervious surface: _____ acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)
- d. Discharges to (identify surface water body(ies)): _____

3. Related NJDEP Permits

How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?

Application Number (if available)

Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. _____
Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq. _____
Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq. _____
Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3 _____

Answer (check one): The entire project Part of the project None of the project

4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)

a. Nonstructural stormwater management strategies

To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? Y () N ()

Also see question #4.j in regard to the Low Impact Development Checklist.

b. Threatened and endangered species

Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly *Helonias bullata* (swamp pink) and/or *Clemmys muhlenbergi* (bog turtle)? Y () N ()

c. Exemption for certain utility line and public pedestrian access projects

How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes," check whichever of the following are applicable:

The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

Underground utility line Aboveground utility line Public pedestrian access

If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.

d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":

- Check whichever of the following are applicable:
 Enlargement of existing public roadway or railroad Public pedestrian access

- Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless “The entire project” or “Part of the project” is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).

- Check whether the waiver is for:

The entire project Part of the project None of the project

If you checked “The entire project,” skip questions #4.f, #4.g, and #4.h.

e. Erosion control

Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y () N ()

Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y () N () If “no,” please explain: _____

f. Groundwater recharge

Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?

Answer (check one): The entire project Part of the project None of the project

If you checked “The entire project” or “Part of the project,” check whichever of the following are applicable:

Urban redevelopment area High pollutant loading area Industrial “source material”

If you checked “Part of the project” or “None of the project,” is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y () N () Also see question 4.j.

Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to “source material”? Y () N ()

Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y () N ()

g. Stormwater runoff quantity

Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y () N ()

If “no,” is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3? Y () N () Also see question 4.j.

h. Stormwater runoff quality

Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y () N ()

If “yes,” is the project designed to meet this requirement? Y () N () Also see question 4.j.

If “no,” check whichever of the following are applicable:

Less than ¼ acre of additional impervious surface NJPDES-based exemption

Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y () N ()

Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y () N () N/A () (N/A if there is no stormwater runoff from the project to FW1 waters)

Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y () N () Also see question 4.j.

If "yes," has the NJDEP approved the proposed encroachment? Y () N () Please explain if the NJDEP has not approved the proposed encroachment:

i. Other special circumstances

Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y () N ()

If "yes," describe the circumstances and identify the standard(s) that are not applicable:

j. Calculations and stormwater engineering report

Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y () N ()

Attach a stormwater engineering report that includes the following information (unless the Exception below applies):

- A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
- A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
- Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.

Exception: If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y () N ()

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y () N ()

l. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y () N ()

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y () N ()

If “yes,” is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y () N ()

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y () N () If “yes,” please explain: