

NJPDES Highway Agency Stormwater  
General Permit

## Stormwater Pollution Prevention Team Members

Number of team members may vary.

Completed by: Mihir Shah  
Title: Principal Highway Engineer

Highway Agency Name: Essex County  
NJPDES #: NJG 0141887  
PIID #: 50577  
Effective Date of Permit Authorization  
(EDPA): March 3, 2004  
Date form complete: March 7, 2005  
Date of most recent update:

Stormwater Program Coordinator: Sanjeev Varghese

Title: County Engineer

Office Phone #: 973-226-8500

Emergency Phone #: 973-322-6817

Outfall Mapping Coordinator: Tom Ries

Title: Senior Engineer

Office Phone #: 973-226-8500

Emergency Phone #: 973-322-0244

Post-Construction Stormwater Management Coordinator: Mihir Shah

Title: Principal Highway Engineer

Office Phone #: 973-226-8500 x263□□

Emergency Phone #: 973-390-1426

Local Public Education Coordinator: Mihir Shah

Title: Principal Highway Engineer

Office Phone #: 973-226-8500 x263□□

Emergency Phone #: 973-390-1426

Regulatory Mechanism Coordinator: Mihir Shah

Title: Principal Highway Engineer

Office Phone #: 973-226-8500 x263□□

Emergency Phone #: 973-390-1426

Physical Operations Coordinator: Sal Macaluso

Title: Director - Division of Roads and Transportation

Office Phone #: 973-239-3366 x238□□

Emergency Phone #: 973-332-7262

Employee Training Coordinator: Sanjeev Varghese

Title: County Engineer

Office Phone #: 973-226-8500 □□

Emergency Phone #: 973-322-6817

Roadside Vegetation Coordinator: Dennis Buery

Title: General Supervisor of Trees

Office Phone #: 973-239-3366 x240□□

Emergency Phone #: 973-332-7291

## SPPP Form 2 - Public Notice

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Mihir Shah/Principal Highway Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Briefly outline the principal ways in which you comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of your stormwater program.

*Essex County will comply with State and local public notice requirements. A memo will be distributed internally to all involved personnel.*

Memo - \_\_\_\_\_ Dated: \_\_\_\_\_

# SPPP Form 3 – New Development and Redevelopment Program

Highway Agency Information

Highway Agency Name: Essex County  
 NJPDES # :NJ 0141887 PI ID #: 50577  
 Team Member/Title: Mihir Shah/Principal Highway Engineer & Tom Ries/Senior Engineer  
 Effective Date of Permit Authorization (EDPA):March 3, 2004  
 Date of Completion: March 7, 2005      Date of most recent update:

Describe in general terms your post-construction stormwater management in new development and redevelopment program (post-construction program), and how it complies with the Highway Permit minimum standard. This description must address how adequate long term operation and maintenance of BMPs will be ensured; compliance with the standard in Attachment C of the permit (new storm drain inlet design standard); adoption and implementation of applicable design and performance standards established under N.J.A.C. 7:8 for major development; and use of the Post-Construction Program Design Checklist for Individual Projects. Attach additional pages as necessary.

*Essex County will develop, implement, and enforce a post-construction program. The post-construction program will comply with Stormwater Management rule (N.J.A.C. 7:8), Attachment C of the Highway Permit and ensure long term operation and maintenance of BMPs. Essex County has included in its design specifications the new storm drain inlet design standard in Attachment C. For Storm Drain Inlets Essex County will use a Curb Inlet with Bicycle Safe Grate and Type 'N - Eco Curb Piece by Campbell Foundry in lieu of NJDOT standard B- and D-type inlets.*

*The County's Annual Reports will list annually the projects and the County will fill out the Post-Construction Program Design Checklist for Individual Projects.*

*Since the EDPA, Essex County has not constructed any projects regulated by the Highway Permit as new development and redevelopment projects. When the County constructs such a project, the County will ensure adequate long-term operation and maintenance of BMPs for that project by preparing (through the Road Department) a project maintenance plan in accordance with N.J.A.C. 7:8-5.8 where applicable, and by requiring and funding the Road Department's implementation of that plan. For BMPs at stormwater facilities, maintenance of these BMPs will also be an integral part of the stormwater facility maintenance program that we are developing to ensure proper function and operation of all County stormwater facilities regulated by the Highway Permit.*

# SPPP Form 4 - Local Public Education Program

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Mihir Shah/Principal Highway Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

## Local Public Education Program

Describe your Local Public Education Program. Be specific on how you will distribute your educational information.

*Essex County does not own or operate any rest and service areas along the County highway system. The county has determined to provide public education information on Storm Drain Labeling, Pet Waste Control, Improper Waste Disposal Control, and Wildlife Feeding Control. The attached educational brochures called, "Solutions to Stormwater Pollution" and "Pet Waste Pollutes Our Waters", which can be downloaded from the NJDEP website, covers these topics.*

*Therefore, in order to bring awareness of the regulations regarding above topics, Essex County has decided to take the following actions;*

- 1. Make the attached brochure available for the public to view at public meetings and public places*
- 2. Display the attached brochure in all parks and public facilities maintained and operated by Essex County.*

*In addition, the county operates one maintenance facility. Signs will be posted at this location warning about improper disposal of waste.*

# SPPP Form 5 – Storm Drain Inlet Labeling

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Mihir Shah/Principal Highway Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005

Date of most recent update:

## Storm Drain Inlet Labeling

Describe your storm drain inlet labeling program, including your labeling schedule, the details of your long-term maintenance plan, and plans on coordinating with watershed groups or other volunteer organizations.

*Essex County will look into organizing volunteers, summer help or a contractor hired through public bid to share the responsibility of storm drain inlet labeling, but realizes that the ultimate responsibility for completion of this requirement falls upon the County to complete and maintain labeling.*

*The attached map shows Essex County has been divided into 2 sectors. The first sector is located in the area above North of Interstate 280 and the second sector is South of Interstate 280. All storm drain inlets at our maintenance yard, and storm drain inlets along streets with sidewalks will be labeled. Essex County is aware that the permit requires all rest and service area storm drain inlets to be labeled, however, the county does not own or operate any rest and service areas.*

*The labeling will be done for storm drain inlets on low speed/low risk roads. The County will use stencils stating "Dump No Waste...Protect Your Water" with a fish symbol. (See attachment of Storm Drain Inlet Label Details)*

*Due to safety concerns, high speed/high risk roadways will be labeled by Essex County Department of Public Works personnel. Employees will also label storm drains located within our maintenance yard. The County will label the storm drain inlets with a stencil stating "Dump No Waste...Protect Your Water" with a fish symbol.*

*As storm drain inlets are replaced, the new inlets will have a stamped message from the foundry. (See attachment of Storm Drain Inlet Label Details)*

*The first sector will be labeled by March 2007 and the second sector will be labeled by March 2009.*

*All storm drain inlet labels will be inspected periodically and maintained as needed by Essex County Department of Public Works employees.*

# SPPP Form 6 – MS4 Outfall Pipe Mapping

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Tom Ries/Senior Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Explain how you will prepare your map (include its type and scale, and the schedule for the mapping process). Who will prepare your map (e.g., employees, a consultant, etc.)?

*Essex County Department of Public Works will map, the location of the end of all of the road department's MS4 outfall pipes, an alphanumeric identifier for the outfall pipe and the name and location of the surface water body(ies) receiving a discharge from the outfall pipe. In accordance with the Highway Agency permit, Essex County Department of Public Works will map the end of the outfall pipes by dividing the Essex County into two sectors. The first sector, which is comprised of the section of Essex County North of Interstate 280, shall be mapped within the allotted 36 months (that is by March 2007), with the second sector South of Interstate 280 being mapped within the remainder of the allotted 60 months (that is by March 2009). (See attached map.)*

*During outfall pipe mapping, county road employees will try to incorporate the inspection of outfall pipes for illicit connections and outfall pipe stream scouring.*

# SPPP Form 7 – Illicit Connection Elimination Program

Highway Agency Information

Highway Agency Name: Essex County  
 NJPDES # :NJ 0141887 PI ID #: 50577  
 Team Member/Title: To be named by Essex County  
 \_\_\_\_\_  
 Effective Date of Permit Authorization (EDPA):March 3, 2004  
 Date of Completion: March 7, 2005      Date of most recent update:

Describe your Illicit Connection Elimination Program, and explain how you plan on responding to complaints and/or reports of illicit connections (e.g., hotlines, etc.). Attach additional pages as necessary.

*Essex County employees will conduct an initial physical inspection of all MS4 outfall pipes during the MS4 Outfall Mapping process. We will be using the Illicit Connection Inspection Report form provided by the NJDEP to record the collected information. MS4's found to have a dry weather flow or intermittent non-stormwater flow will be rechecked in cooperation with the Essex County Health Department to locate the illicit connection. If we are able to locate the illicit connection and find that it is from the County's own activities, it will be eliminated within six months. If, after a minimum of three inspections, we are unable to locate the source of the illicit connection it will be noted on the Closeout Investigation Form. For illicit connections from a public source (e.g., a neighboring municipality), notification will be provided to the source and a written explanation sent to the NJDEP detailing the results of the investigation. Essex County will only alert the NJDEP of illicit connections found to be from a private entity. If the illicit connection poses an immediate threat, employees have been instructed to call the NJDEP hotline. Separate written notification of such action will also be sent to the NJDEP.*

*The County will inspect all MS4 outfall pipes for illicit connections every year after the initial inspection and will report findings to the NJDEP annually.*

# SPPP Form 8 – Illicit Connection Records

Highway Agency Information	Highway Agency Name: <u>Essex County</u> NJPDES # : NJ <u>0141887</u> PI ID #: <u>50577</u> Team Member/Title: <u>To be named by Essex County</u> Effective Date of Permit Authorization (EDPA): <u>March 3, 2004</u> Date of Completion: <u>March 7, 2005</u> Date of most recent update:
<b>Prior to July 1, 2006</b>	
<i>Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.</i>	
Total number of inspections performed this year? <u>Program implementation will begin by October 2005</u>	
Number of outfalls found to have a dry weather flow? <u>N/A</u>	
Number of outfalls found to have an illicit connection? <u>N/A</u>	
How many of the Highway Agency's own illicit connections were eliminated? <u>N/A</u>	
Of the Highway Agency's own illicit connections found, how many remain? <u>N/A</u>	
How many illicit connections found to emanate from another entity were reported to NJDEP? <u>N/A</u>	
<b>July 1, 2006 – June 30, 2007</b>	
<i>Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.</i>	
Total number of inspections performed this year?	
Number of outfalls found to have a dry weather flow?	
Number of outfalls found to have an illicit connection?	
How many of the Highway Agency's own illicit connections were eliminated?	
Of the Highway Agency's own illicit connections found, how many remain?	
How many illicit connections found to emanate from another entity were reported to NJDEP?	
<b>July 1, 2007 – June 30, 2008</b>	
<i>Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.</i>	
Total number of inspections performed this year?	
Number of outfalls found to have a dry weather flow?	
Number of outfalls found to have an illicit connection?	
How many of the Highway Agency's own illicit connections were eliminated?	
Of the Highway Agency's own illicit connections found, how many remain?	
How many illicit connections found to emanate from another entity were reported to NJDEP?	

July 1, 2008 – June 30, 2009

**Note:** *Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.*

Total number of inspections performed this year?

Number of outfalls found to have a dry weather flow?

Number of outfalls found to have an illicit connection?

How many of the Highway Agency's own illicit connections were eliminated?

Of the Highway Agency's own illicit connections found, how many remain?

How many illicit connections found to emanate from another entity were reported to NJDEP?

## SPPP Form 9 – Litter Pick Up Program

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Sal Macaluso/Director - Division of Roads and Transportation

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Please describe your litter pick up program. Be sure to include the refuse collection schedule and detail how rest area, service area, and roadside clean ups will be implemented.

(NOTE: Attach a litter pick up log containing the following information: dates of roadside clean ups and estimates of the total amount of trash and debris collected.)

*Essex County currently utilizes the Adopt-A-Highway program for roadside clean-ups. Clean-ups are performed twice a month by Adopt-A-Highway for roads that are adopted by Private Companies. The County roads covered by Adopt-A-Highway are JFK Parkway, Eisenhower Parkway, Livingston Ave, Old Short Hills Road, Millburn and Bloomfield Avenue, all of Livingston and Bloomfield. Bags of trash are then picked up by the Essex County Department of Public Works and brought to their Maintenance Yard where they are placed in roll-off containers. The records are kept on a daily work sheet, which include pick-up date and number of bags collected.*

*For the remainder of the County roads, Essex County utilizes assistance for clean-ups from 2nd Chance Crew from the Corrections Facilities, which is based on availability of the crew.*

*The New Jersey Clean Communities Program provides some funds to Essex County for litter pick-ups and supplies for the Maintenance Yard.*

*Essex County does not operate any rest or service areas nor do they own or operate any trash receptacles along County Roadways.*

# SPPP Form 10 – Regulatory Mechanisms

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Mihir Shah/Principal Highway Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005

Date of most recent update:

For each regulatory mechanism, give the date of adoption. If not yet adopted, explain the development status:

Pet Waste: Not Applicable. Essex County does not own or operate any rest areas or service areas.

(NOTE: If the Highway Agency is not developing a pet waste regulatory mechanism because the Agency does not operate any rest areas or service areas for the Agency facilities subject to this permit, provide that explanation above.)

Improper Waste Disposal: Memo issued on (date)

Wildlife Feeding: Memo issued on (date)

Illicit Connections: Memo issued on (date)

What is the nature of these regulatory mechanisms and how will they be enforced?

*Not Applicable*

If your position is that the Highway Agency has no legal authority to adopt and/or enforce a mechanism to regulate pet waste disposal or wildlife feeding by the general public on Highway Agency property, attach a statement from your attorney supporting this position.

*Essex County does not have any regulatory mechanisms to enforce Improper Waste Disposal, Wildlife Feeding and Illicit Connections. The County will inform its personnel and the general public regarding recommended guidelines to follow. The local municipalities will be responsible for any enforcement action. See attached letter from the Essex County Legal Counsel.*

# SPPP Form 11 – Storm Drain Inlets (Retrofitting)

Highway Agency Information

Highway Agency Name: Essex County  
 NJPDES # :NJ 0141887 PI ID #: 50577  
 Team Member/Title: Mihir Shah/Principal Highway Engineer  
 Effective Date of Permit Authorization (EDPA):March 3, 2004  
 Date of Completion: March 7, 2005 Date of most recent update:

What type of storm drain inlet design will generally be used for retrofitting? *For most projects Essex County will use the NJDOT bicycle safe grate style and (if needed) 2541 Phase II Eco - Safety Bar by Campbell Foundry or other equivalent product which will allow for a curb opening w/ a clear space no bigger than 2" across the smallest dimension.*

Repaving, repairing, reconstruction or alteration project name (attach additional pages as necessary)	Projected start date	Start date	Date of completion	# of storm drain inlets	# of storm drains with exemptions
_____	_____	-	-	_____	_____
		-	-		

Are you claiming any alternate device exemptions or historic place exemptions for any of the above projects? Please explain.

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# SPPP Form 12 – Street Sweeping and Road Erosion Control Maintenance

Highway Agency Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Sal Macaluso/Director - Division of Roads and Transportation

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

## Street Sweeping

Please describe the street sweeping schedule that you will maintain.

(NOTE: Attach a street sweeping log containing the following information: date and area swept, # of miles swept and the total amount of materials collected.)

*Essex County has determined which of its roads require monthly sweeping under the Highway Permit, and currently have an on-going sweeping program for these roads. All County roads are currently swept twice a month, year-round and weather permitting. Records of Street Sweeping are kept by the Maintenance Division and are available for review.*

*(See Form 13 for the road department's proper handling and disposal of debris program.)*

## Road Erosion Control Maintenance

Describe your Road Erosion Control Maintenance Program, including inspection schedules. A list of all sites of roadside erosion and the repair technique(s) you will be using for each site should be attached to this form.

(NOTE: Attach a road erosion control maintenance log containing the following information: location, repairs, date)

*Essex County will utilize Essex County Department of Public Works employees to inspect all county roads and identify existing roadside erosion. Road erosion inspections will be conducted twice a year. After eroding sites are identified, they will be prioritized, and then repaired in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey. All maintenance personnel will maintain an inspection log that will include a list of all repairs and dates repairs were completed. Individual lists will be compiled by Sanjeev Varghese/County Engineer – Essex County, and included in the Annual Report and Certification. This program of inspections and repairs will begin September 2005.*

# SPPP Form 13 – Stormwater Facility Maintenance

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Sal Macaluso/Director - Division of Roads and Transportation

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Please describe your annual catch basin cleaning program and schedule. Attach additional pages as necessary.

*Essex County will maintain its yearly catch basin cleaning schedule in compliance with the minimum standard set forth in the Highway Permit. If, at the time of inspection, no sediment, trash or debris is observed in the catch basin, then that catch basin will not be cleaned that year. All catch basins will be inspected yearly, even if they were found to be clean the previous year. At the time of cleaning, the catch basins will also be inspected for proper functioning and operation. If catch basins were found not to be functioning properly and repairs were not made during the year, a schedule for such repairs will be included in the annual report and certification. Essex County will maintain records of inspections, maintenance and repairs that were performed each year for all stormwater facilities. The program is scheduled to begin in 2005.*

*All potentially contaminated road clean up materials will be staged on an impervious surface and covered with a waterproof material for the appropriate staging time, per the guidelines set forth by the NJDEP Division of Solid and Hazardous Waste.*

Please describe your stormwater facility maintenance program for cleaning and maintenance of all stormwater facilities operated by the Highway Agency. Attach additional pages as necessary.

(NOTE: Attach a maintenance log containing information on any repairs/maintenance performed on stormwater facilities to ensure their proper function and operation.)

*Essex County will develop and implement a stormwater facility maintenance program that ensures proper function and operation of all highway system stormwater facilities operated by the County. Stormwater facilities will be regularly inspected, on an annual basis, and repairs will be prioritized. Maintenance will be done in accordance with NJ Stormwater BMP Manual.*

# SPPP Form 14 - Roadside Vegetation Management

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Dennis Buery/General Supervisor of Trees

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Describe your roadside vegetation management program to limit the application of herbicides and mulch. Attach additional pages as necessary.

*In accordance with the Highway Permit, Essex County will no longer apply herbicides to areas unless they are impractical to mow around. In such areas where herbicides must be used, they will not be applied outside of the prescribed two-foot radius of any structure for which it is impractical to mow around.*

*For application of mulch Essex County will follow the guidelines recommended in the, "Standards for Soil Erosion and Sediment Control" in New Jersey, N.J.A.C. 2:90-1.*

*In regards to applying mulch and herbicides, designated workers who perform roadside vegetation management will be trained on the specifications of the permit and how to properly apply it. (See SPPP Form 18)*

# SPPP Form 15 - Outfall Pipe Stream Scouring Remediation

Highway Agency Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Louis Rodriguez/Senior Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2005

Date of Completion: March 7, 2005 Date of most recent update:

Describe your stormwater outfall pipe scouring detection, remediation and maintenance program to detect and control active, localized stream and stream bank scouring. Attach additional pages as necessary.

(NOTE: Attach a prioritized list of sites observed to have scouring, date of anticipated repair, method of repair and date of completion.)

*Essex County will develop and implement a stormwater outfall pipe stream scouring detection, remediation, and maintenance program to detect and control localized stream and stream bank scouring in the vicinity of the highway system outfall pipes operated by the County.*

*The County will coordinate the initial steps of this effort with the mapping and inspections of outfall pipes and prioritize the outfall pipes found to have scouring in the order in which they will need to be repaired based on degree of erosion. To help in prioritizing the outfall pipes, the County will photograph the scouring found at each outfall site. A schedule will be established for repairs, beginning with the outfall pipes most in need of remediation or those with easy access. In addition, repairs that do not need any NJDEP permits or other local, State, or Federal permits may be done first. All repairs will be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90.1).*

*The County will inspect all outfall pipes for stream scouring on an annual basis after the initial inspection.*

*A Program Status List shall be compiled and include in the Annual Report and Certification.*

# SPPP Form 16 – De-icing Material Storage

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Sal Macaluso/Director - Division of Roads and Transportation

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

## De-icing Material Storage

Describe how you currently store your highway agency's de-icing materials, and describe your inspection schedule. If your current storage practices do not meet the de-icing material storage SBR describe your construction schedule and your seasonal tarping interim measures. If you plan on sharing a storage structure, please include its location, as well as a complete list of all concerned public entities. If you store sand outdoors, describe how it meets the minimum standard.

*Essex County currently complies with the minimum standard for de-icing material storage of salt. The county has three (3) permanent, covered, asphalt floor, dome structures for de-icing material storage in the following locations:*

- 1. Essex County Department of Public Works, 900 Bloomfield Ave, Verona, NJ;*
- 2. Hendrick Field, Branch Brook Park, Belleville, NJ; and*
- 3. South Mt. Yard; South Orange Ave. and Cherry Lane, Millburn, NJ.*

*These facilities are regularly maintained and inspected annually by Essex County Department of Public Works.*

*Sand is stored in the Parks Dept. Yard. The sand is stored outdoors and adheres to the 50-foot setback from any inlets, ditches, channels, and surface water bodies.*

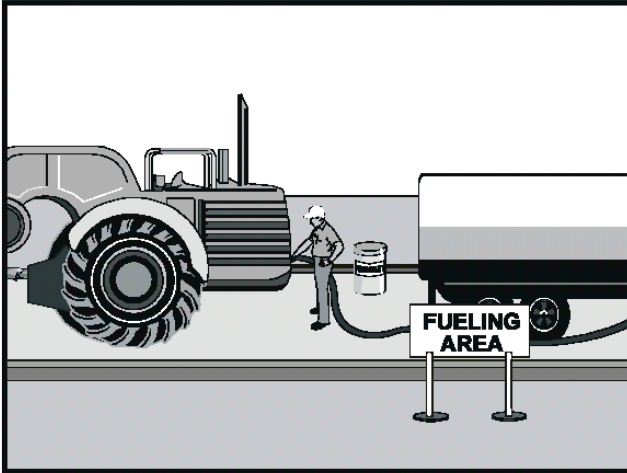
# SPPP Form 17 – Standard Operating Procedures

<b>Highway Agency Information</b>	Highway Agency Name: <u>Essex County</u> NJPDES # :NJ <u>0141887</u> PI ID #: <u>50577</u> Team Member/Title: <u>Sal Macaluso/Director - Division of Roads and Transportation</u> Effective Date of Permit Authorization (EDPA): <u>March 3, 2004</u> Date of Completion: <u>March 7, 2005</u> Date of most recent update:
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<b>BMP</b>	<b>Date SOP went into effect</b>	<b>Describe your inspection schedule</b>
<b>Fueling Operations</b> (including the required practices listed in Attachment D of the permit)		<i>A list of fueling locations has been compiled and attached to this form. These locations will be inspected once a month.</i>
<b>Vehicle Maintenance</b> (including the required practices listed in Attachment D of the permit)		<i>Monthly inspections will be held at vehicle maintenance sites to ensure that the SOP is being met.</i>
<b>Good Housekeeping Practices</b> (including the required practices listed in Attachment D of the permit)  <b>Attach inventory list required by Attachment D of the permit</b>		<i>Inspections will be conducted on a monthly basis to ensure that good housekeeping practices are in effect.</i>

# Essex County Road Department Standard Operating Procedures Vehicle and Equipment Fueling

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## Essex County Road Department Fueling Facilities

Francis A. Byrne Golf Course (West Orange)  
South Mountain Reservation (Millburn)  
Hendricks Field Golf Course (Belleville)  
Fleet Management (Cedar Grove)  
Branch Brook Park (Newark)  
County Hall of Records (Newark)  
Weequahic Park (Newark)  
Brookdale Park (Bloomfield)

**Introduction and Purpose** Vehicle and equipment fueling procedures and practices are designed to minimize pollution of surface or ground waters. Understanding the procedures for delivering fuel into vehicles, mobile fuel tanks, and storage tanks is critical for this purpose. Safety is always the priority.

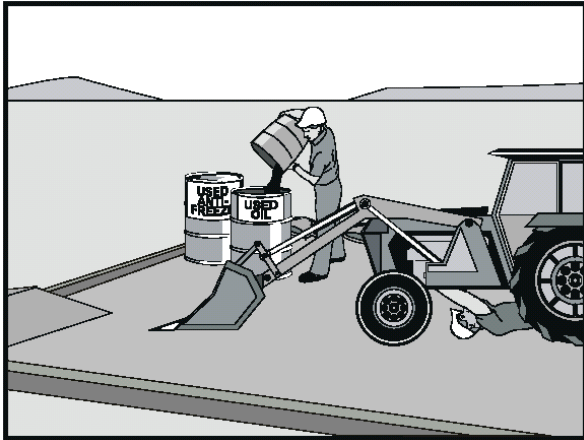
**Scope** These procedures are to be implemented at all maintenance yards with fueling, including mobile fueling operations.

**Standards and Specifications (for vehicle and equipment fueling)**

- Shut the engine off
- Ensure that the fuel is the proper type of fuel.
- Absorbent spill clean-up materials and spill kits shall be available in fueling areas and on mobile fueling vehicles and shall be disposed of properly after use.
- Nozzles used in vehicle and equipment fueling shall be equipped with an automatic shut-off to prevent overfill.
- Fuel tanks shall not be “topped off.”
- Mobile fueling shall be minimized. Whenever practical, vehicles and equipment shall be transported to the designated fueling area in the maintenance yard.
- Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response.

- Standards and Specifications (for bulk fueling)
- Drip pans or absorbent pads shall be used under all hose and pipe connections and other leak-prone areas during bulk fueling.
  - Block storm sewer inlets, or contain tank trucks used for bulk transfer, with temporary berms or temporary absorbent booms during the transfer process. If temporary berms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel must be within the temporary berms during the loading/unloading of bulk fuels.
  - Protect fueling areas with berms and/or dikes to prevent run-on, runoff, and to contain spills.
  - A trained employee must always be present to supervise during bulk transfer.
- Spill Response
- Conduct cleanups of any fuel spills immediately after discovery.
  - Uncontained spills are to be cleaned using dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (e.g., kitty litter, sawdust, etc.) and absorbent materials shall be swept up.
  - Collected waste is to be disposed of properly.
  - Contact the Essex County Health Department Action Hotline at 877-927-6337.
- Maintenance and Inspection
- Fueling areas and storage tanks shall be inspected monthly.
  - Keep an ample supply of spill cleanup material on the site.
  - Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be repaired or replaced immediately.

# Essex County Road Department Standard Operating Procedure Vehicle Maintenance



## Essex County Road Department Maintenance Yards BMP Objectives

- Waste Management
- Spill Prevention,  
Containment and  
Countermeasures
- Pollution Control

**Introduction and Purpose** This SOP contains the basic practices of vehicle maintenance to be implemented at all maintenance yards including maintenance activities at ancillary operations for the Essex County Road Department. The purpose of this SOP is to provide a set of guidelines for the Essex County Road Department vehicle maintenance yards including maintenance activities at ancillary operations.

**Scope** This SOP applies to all maintenance yards including maintenance activities at ancillary operations within the Essex County Road Department.

- Standards and Specifications**
- Conduct vehicle maintenance operation only in designated areas.
  - Whenever possible, perform all vehicle and equipment maintenance at an indoor location with a paved floor.
  - Always use drip pans.
  - Absorbent spill clean-up materials shall be available in maintenance areas and shall be disposed of properly after use.
  - Maintenance areas shall be protected from stormwater run-on and runoff, and shall be located at least 50 feet from downstream drainage facilities and watercourses.
  - Use portable tents or construct a roofing-device over long-term maintenance areas and for projects that must be performed outdoors.

- Do not dump or dispose oils, grease, fluids, and lubricants onto the ground.
- Do not dump or dispose batteries, used oils, antifreeze and other toxic fluids into a storm drain or watercourse.
- Do not bury tires.
- Collect waste fluids in properly labeled containers and dispose properly.

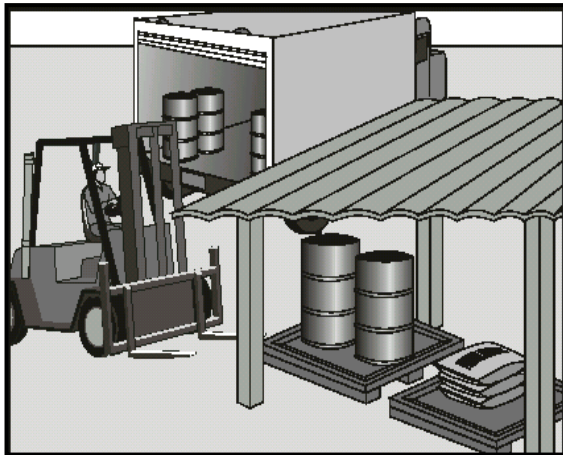
Spill Response  
and Reporting

- Provide spill containment dikes or secondary containment around stored oils and other fluid storage drum(s).
- Conduct cleanups of any fuel spills immediately after discovery.
- Spills are to be cleaned using dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (e.g., kitty litter, sawdust, etc.) and the rest of the area is to be swept.
- Collected waste is to be disposed of properly.
- Contact the Essex County Health Department Action Hotline at 877-927-6337.

Maintenance  
and Inspection

- Periodically check for leaks and damaged equipment and make repairs as necessary.

# Essex County Road Department Standard Operating Procedure Good Housekeeping



## Essex County Road Department Good Housekeeping Goals

- Proper Recycling
- Proper Waste Disposal
- Pollution Prevention

**Introduction and Purpose** This SOP contains the basic practices of good housekeeping to be implemented at maintenance yards including maintenance activities at ancillary operations for the Essex County Road Department. The purpose of this SOP is to provide a set of guidelines for the employees of Essex County Road Department for Good Housekeeping Practices at their maintenance yards including maintenance yards at ancillary operations.

**Scope** This SOP applies to all maintenance yards including maintenance activities at ancillary operations in Essex County Road Department.

### Standards and Specifications (General)

- All containers should be properly labeled and marked, and the labels must remain clean and visible.
- All containers must be kept in good condition and tightly closed when not in use.
- When practical, chemicals, fluids and supplies should be kept indoors.
- If containers are stored outside, they must be covered and placed on spill platforms.
- Keep storage areas clean and well organized.
- Spill kits and drip pans must be kept near any liquid transfer areas, protected from rainfall.
- Absorbent spill clean-up materials must be available in maintenance areas and shall be disposed of properly after use.
- Place trash, dirt and other debris in the dumpster.
- Collect waste fluids in properly labeled containers and dispose of them properly.
- Establish and maintain a recycling program by disposing papers, cans, bottles and trash in designated bins.

Standards and Specifications (Salt and De-icing Material Handling)

- During loading and unloading of salt and de-icing materials, prevent and/or minimize spills. If salt or de-icing materials are spilled, remove the materials using dry cleaning methods. All collected materials shall be either reused or properly discarded.
- Sweeping should be conducted once a week to get rid of dirt and other debris. Sweeping should also be conducted immediately following loading/unloading activities, when practical.
- Minimize the tracking of materials from storage and loading/unloading areas.
- Minimize the distance that salt and de-icing materials are transported during loading/unloading activities.
- Any materials that are stored outside must be tarped when not actively being used.
- If interim seasonal tarping is being implemented, de-icing materials may be stored outdoors only between October 15<sup>th</sup> through April 30<sup>th</sup>.

Spill Response and Reporting

- Conduct clean up of any spill(s) immediately after discovery.
- Spills are to be cleaned using dry cleaning methods only.
- Contact the Essex County Health Department Action Hotline at 877-927-6337.

Maintenance and Inspection

- Periodically check for leaks and damaged equipment and make repairs as necessary.
- Perform monthly inspections of all (indoor and outdoor if applicable) storage locations.

# SPPP Form 18 – Employee Training

Highway Agency  
Information

Highway Agency Name: Essex County

NJPDES # :NJ 0141887 PI ID #: 50577

Team Member/Title: Sanjeev Varghese/County Engineer

Effective Date of Permit Authorization (EDPA):March 3, 2004

Date of Completion: March 7, 2005 Date of most recent update:

Describe your employee training program. For each required topic, list the employees that will receive training on that topic, and the date the training will be held. Attach additional pages as necessary.

*For our employee training program, we will group the required topics together based upon similarities in context. Any questions should be directed to the Employee Training Coordinator. Training will occur in a seminar type fashion or information will be sent in a memorandum to all appropriate employees.*

*Waste Disposal Education which includes overviews of Pet Waste Control, Improper Waste Disposal Control, Wildlife Feeding Control, and Illicit Connection Prohibition will be sent to appropriate employees of the Essex County Road Department and Parks Department in a memorandum on \_\_\_\_\_.*

*Roadside Vegetation Management training will be scheduled on \_\_\_\_\_ by Dennis Buery, Roadside and Vegetation Coordinator. The roadside vegetation crew will be required to attend.*

*Street Sweeping, Stormwater Facility Maintenance, and Maintenance Yard Operations will be grouped into one training session that will more than likely be scheduled on \_\_\_\_\_. Sal Macaluso, Physical Operations Coordinator, will be in charge of developing and conducting this seminar. Maintenance Yard and Road Department employees will be required to attend.*

*Illicit Connection Elimination and Outfall Pipe Mapping, as well as Road Erosion Control and Outfall Pipe Stream Scouring Remediation, will be covered on \_\_\_\_\_ with Mihir Shah, Post-Construction Stormwater Management Coordinator and Tom Reis, Outfall Mapping Coordinator. We are in the process of developing a team specifically for dealing with illicit connections and outfall pipe mapping. Just those designated to this team will be required to attend this event.*

*Lastly, Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment will be covered by Mihir Shah on \_\_\_\_\_ for highway engineering and maintenance personnel.*

*Dates for annual training programs after 2005 are yet to be determined.*