

Conservation Commission
25 Bryants Lane
Tyngsborough, MA 01879
Phone: 978-649-2300 ext. 109
Fax: 978-649-2301
Email: lorlc@tyngsboroughmass.com



Fax

To: Ann Herrick	From: Lori Capone
Fax: 617-918-0505	Pages: 19
Phone: 617-918-1560	Date: 4/27/2006
Re: Phase II Stormwater Report	CC: [Click here and type name]

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

Ms. Herrick,

Attached please find the Phase II Stormwater Year 3 Report for the Town of Tyngsborough.

If you have any questions, please do not hesitate to contact me at 978-649-2300 ext. 109.

Respectfully,

Lori Capone
Conservation Director



***Town of Tyngsborough
Conservation Commission***

25 Bryants Lane,
Tyngsborough, Massachusetts 01879-1003
Office: (978) 649-2300 ext. 109
Fax: (978) 649-2301
Email: loric@tyngsboroughmass.com

April 27, 2006

Environmental Protection Agency
c/o Ann Herrick (CIP)
One Congress Street
Boston, MA 02114

Re: Phase II Stormwater Year 3 Report

Dear Ms. Herrick,

Enclosed please find the Phase II Stormwater Year 3 Report for the Town of Tyngsborough.

If you have any questions, please do not hesitate to contact me at 978-649-2300 ext. 109.

Respectfully,

Lori Capone
Conservation Director

cc: Glenn Haas, DEP
File



Enter your transmittal number

W079936

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://www.mass.gov/dep/counter/trasmfrn.shtml> or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

**Massachusetts Department of Environmental Protection
Transmittal Form for Permit Application and Payment**

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records.

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

BRP WM 08A

NPDES Stormwater General Permit

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Annual Report for Notice of Intent for MS4

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

Town of Tyngsborough

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

25 Bryants Lane

5. Street Address

Tyngsborough

MA

01879

978-649-2300

109

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Lori Capone

loric@tyngsboroughmass.com

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Tyngsborough

1. Name of Facility, Site Or Individual

Same as Above

2. Street Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

309

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? yes no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

1. Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

Municipality/Organization: Tyngsborough

EPA NPDES Permit Number: MAR051229

MaDEP Transmittal Number: W079936

**Annual Report Number
& Reporting Period:**

No. 2: March 05-March 06

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Lori Capone

Title: Director of Conservation

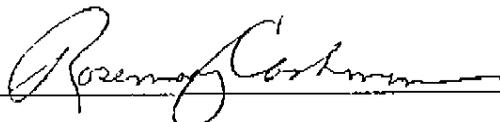
Telephone #: 978-649-2300 ext. 109

Email: loric@tyngsboroughmass.com

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: Rosemary Cashman

Title: Town Administrator

Date: April 27, 2006

Part II. Self-Assessment

Two thousand five was another year of cutbacks, both financially and in personnel for the Town of Tyngsborough. As the Department of Planning and Community Development was dissolved in 2003, all duties set forth in the original permit under the Department of Planning and Community Development have been absorbed by the Conservation Department whose budget and personnel have been decreased significantly this year and will be further reduced in FY07. Despite personnel turnover and fiscal constraints, the Town of Tyngsborough accomplished almost all of the proposed activities set forth in our permit application.

1. ***Public Education and Outreach:*** The Town was unable to successfully complete BMPs 1 and 2. A stormwater pamphlet will be developed in Permit Year 4 with distribution through tax bills to reach all residents. Additionally, the school department will develop and execute a stormwater poster design program in Year 4. Only two articles regarding stormwater management were published this year due to reduction in personnel. The Board of Health continued to distribute pamphlets on household waste disposal and guides for homes, schools, and restaurants on grease traps. The Highway Department was able to stencil another 146 catch basin this year, totaling 262 out of the total 1336 catch basins in Town. In addition to the public education components proposed in our permit, the Conservation Department has integrated an educational program on stormwater management on the cable access channel.
2. ***Public Involvement and Participation:*** The Board of Selectmen has not held any public meetings regarding stormwater management this year. The Board of Health held their regularly scheduled Hazardous Waste Day on May 20, 2005. The Conservation Department is in the process of developing a water quality monitoring program and establishment of stream clean-up days for implementation in Year Four.
3. ***Illicit Discharge Detection and Elimination:*** The Town did purchase a GPS system to continue to map additional catch basins. This component of the permit is limited due to funding. The Town Meeting will consider a Warrant Article at Fall Town Meeting to fund this project. All departments have fulfilled BMP #14 requiring employee training for spill prevention. A comprehensive Hazardous Materials Release Plan for the Town has been completed. The Highway Department has continued wet and dry weather inspections of priority outfalls. An INI Study completed in May 2002 showed very minor infiltration of stormwater into the sewer system. The Sewer Department did not camera any lines this year as there was no need. They have developed and distributed a pamphlet for sewer users regarding illicit connections to the sewer system especially pertaining to sump pumps. The Board of Health continues to provide a 24/7 hotline for detection of failed septic systems.
4. ***Construction Site Stormwater Runoff Control:*** The Conservation Commission has revised their rules and regulations requiring all filings involving a new storm drain system or connection to an existing storm drain system provide the

Commission with a detailed stormwater pollution prevention plan for during construction, as well as, for long-term maintenance of the stormwater system. This plan shall specify detailed construction methods for erosion control, identify responsible parties and shall include a signed affidavit that all conditions of the pollution prevention plan shall be met. The discharge of any substances into the storm drain system, other than stormwater, is strictly prohibited. The Planning Board has revised their Subdivision Rules and Regulations for construction site runoff control to conform to the Massachusetts Department of Environmental Protection Stormwater Management Policy Standards and Best Management Practices. Additionally the Planning Board has instituted construction phasing and bonding schedules to minimize adverse impacts to water quality

- 5. *Post-construction Stormwater Management in New Development and Redevelopment:* The Planning Board will be revising their subdivision rules and regulations requiring long-term maintenance of stormwater facilities and minimizing impacts to water quality. The Planning Board will also prepare a zoning bylaw for control of post development runoff. The Conservation Commission has revised their regulations to require submission of a long-term maintenance plan for stormwater management facilities.**
- 6. *Pollution Prevention and Good Housekeeping in Municipal Operations:* All BMPs for this requirement have been satisfactorily completed.**

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1	Develop pamphlet on stormwater	Stormwater Committee, Conservation Department	Distribute with water, sewer, tax bills	Due to personnel turnover, have not developed yet. Will do for next distribution of tax bills.	Continued dispersal with tax bills.
Revised					
2	Develop stormwater poster design program	Stormwater Committee, Conservation Department, School Dept.	Annual contest by students	Due to scheduled conflicts will execute in Year Four.	Annual contest.
Revised					
3	Develop pamphlet on household waste disposal	Board of Health	Distribute with Hazardous Waste collection info	Completed	Continued distribution at Health Fair and Hazardous Waste Day.
Revised					
4	Guide for home, school, restaurant for grease traps.	Board of Health	Distribute at Health Fair, with septic approvals and inspections.	Completed	Continue distributing.
Revised					
5	Articles in newsletter	Conservation Agent	Quarterly articles on related topics.	Due to personnel and budgetary cuts only two articles were published this year.	Will continue with quarterly articles on related topics.
Revised					
6	Health Fair	Board of Health	Annual booth on Stormwater	Completed.	Will display stormwater information at Health Fair next year.
Revised					
7	Catch basin stencil program	Highway Department	Stencil catch basins over three years.	Have stenciled 262 of the total 1336 catch basins in Town.	Will continue stenciling program as time and money permits.

Revised					
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1a. Additions

7A	Stormwater video on cable access.	Conservation Department	Play a few times throughout the year	Played During Year 3	Will continue to develop more programming.
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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
8 Revised	Public hearings on SWMP with annual review and comment	Selectmen, Stormwater Committee	Two public meetings on SWMP. Draft on website	No meetings held. Due to personnel turnover, plan is not developed.	Plan will be developed and placed on website within the year.
9 Revised	Create Stormwater Advisory Committee	Selectmen, Stormwater Committee	Meet twice annually for review of program.	Due to timing conflicts, Committee did not meet but communicated through correspondence.	Meet annually to review program.
10 Revised	Volunteer water quality monitoring program	Conservation Department	Develop program Year 2, annual testing thereafter	A water quality monitoring program has been initiated for Lake Mascuppic, programs for other waterways will be developed in Year 4.	Develop and implement water quality monitoring program.
11 Revised	Volunteer stream clean-up days	Conservation Department	Annual cleanup of selected streams	Adopt-a-stream program has been initiated.	Implement adopt-a-stream program.
12 Revised	Hazardous Waste Collection Day	Board of Health	Annual collection of hazardous materials	Completed	Annual Hazardous Waste Day

Revised					
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2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
13	GIS mapping of outfalls and receiving waters	Conservation Department, Highway Department	Portions of Town to be done annually	The Town purchased a GPS system to map catch basins and outfalls.	Warrant Article for Fall Town Meeting to provide funding to complete mapping catch basins and outfalls.
Revised					
14	Employee training on spill prevention	School, Water, Highway, Sewer Depts.	Annual Training	Completed	Training will continue on spill prevention.
Revised					
15	Response plan for hazardous spills	Local Emergency Management Committee	Develop and implement plan for employees and public	A Comprehensive Hazardous Materials Release Plan for the Town has been completed.	Implementation
Revised					
16	Wet & dry weather inspections for priority outfalls	Highway	Identify likely areas, perform annually	Continue performing wet and dry inspections	Continue sampling program.
Revised					
17	Modify bylaws to prohibit dumping into storm systems	Planning Board, Conservation Commission, Selectmen	Develop bylaw for town meeting vote.	The Conservation Commission has developed a Regulation prohibiting dumping into storm systems	Planning Board should develop bylaw for Fall Town Meeting.

Revised					
18	Monitor illicit discharges into sewer & stormwater systems	Sewer	Identify likely portions of town and monitor annually.	The Sewer Superintendent has identified areas of concern and monitors continually	Continued to monitor and eliminate illicit connections to the sewer systems.
Revised					
19	Detection of failed septic systems	Board of Health	Provided Hotline for public	Two telephone lines are connected to the Board of Health office 24 hours a day with voice mail.	Continue to provide hotline.
Revised					

3a. Additions

19A	Pamphlet developed and distributed regarding illicit connections to sewer system	Sewer Commission	Distribute yearly with sewer bills	Developed and Distributed	Continue to distribute with sewer bills. Place on website.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
20	Enhance zoning for sediment and erosion control	Planning Board, Conservation Commission	Prepare zoning bylaw for town meeting vote	Planning Board and Conservation Commission have revised Regulations but have not developed a Bylaw.	Planning Board to develop a Bylaw for Fall Town Meeting
Revised					
21	Revise site plan, subdivision, conservation regulations	Planning Board, Conservation Commission	Revise to require stormwater pollution prevention plan.	The Conservation Commission and Planning Board implemented regulations requiring conformance with the Massachusetts Department of	Implementation

Revised					
22	Develop regulations for erosion and sedimentation	Conservation, Planning Board, Selectmen,	Regulations including control of waste & portable toilets	The Planning Board and Conservation Commission have developed regulations regarding erosion and sedimentation.	Planning Board to develop regulations regarding control of waste and portable toilets.
Revised					
23	Revise site plan & subdivision regulations	Planning Board, Conservation Commission, Selectmen	Regulations including inspection and enforcement in Bond amount	Completed	Implementation
Revised					
24	Revise site plan & subdivision regulations	Planning Board, Conservation Commission, Selectmen	Regulations including signed affidavit that conditions will be met.	Completed	Implementation
Revised					
Revised					

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 4
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25	Modify zoning for control of post development runoff	Planning Board, Highway	Prepare zoning bylaw for town meeting vote		Planning Board to develop a zoning bylaw for Fall Town Meeting.
Revised					
26	Modify site plan & subdivision regulations for maintenance	Planning Board, Conservation Commission, Selectmen	Regulations including long term maintenance of stormwater	Completed	Implementation
Revised					
27	Modify site plan & subdivision regulations for water quality	Planning Board, Conservation Commission, Selectmen	Regulations including minimizing impacts to water quality		Needs to be developed for Fall Town Meeting
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
28 Revised	Training program for town employees	School, Water, Highway, Sewer, Emergency Management Committee	Annual training for fertilizer, snow, dumping, maintenance and waste	Completed	Continue annual training
29 Revised	Street Sweeping	Highway	Annual sweeping of streets	Street sweeping began the first week in April.	Will continue to sweep streets first chance in the spring.
30 Revised	Catch basin cleaning	Highway	Annual cleaning of basins	Catch basin cleaning began the third week in March	Will continue to clean catch basin first chance in the spring
31 Revised	Water main flushing with dechlorination	Water	Annual flushing after street sweeping	Completed after street sweeping completed	Will continue to flush water main first chance in spring after street sweeping completed.
32 Revised	Spill kits at municipal facilities	All Depts.	Annual Training	All municipal buildings have spill kits. Fire, Highway, Board of Health, Conservation, and most of the Police Dept. have had HAZMAT 1 st Response Awareness training.	
33 Revised	TV or inspect all sewer lines in 20 years	Sewer, Highway	Develop plan in five years	Sewer Department purchased a camera package to inspect sewer lines.	Initial inspection of possible illegal connections and propose dye testing this summer along with using the camera to insure that all connections are approved and tested for discharge parameters.
34 Revised	Develop salt alternatives for sensitive areas	Highway	Develop and purchase in two years	Researching alternatives. Uses reduced salt/sand mixture in sensitive areas.	Will continue to research alternatives.
35	Inspect and maintain salt shed	Highway	Annual inspection	Deicing materials storage facility continually monitor with close scrutiny	Continued monitoring

Revised					
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6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No sampling was performed this year.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	NO
Annual program budget/expenditures	(\$)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	75 %
Stormwater management committee established	(y/n)	YES

Stream teams established or supported	(# or y/n)	NO
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	NO
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	10%
▪ material collected	(tons or gal)	3100 gal
School curricula implemented	(y/n)	NO

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				X
▪ Post-Development Stormwater Management				X

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	

Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	30%
% of population on septic systems	(%)	70%

Construction

Number of construction starts (>1-acre)	(#)	102
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	100

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	1,336

Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Not weighed
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Screened for loam
Cost of screenings disposal	(\$)	Free

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Not weighed
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Screened for loam
Cost of sweepings disposal	(\$)	None
Vacuum street sweepers purchased/leased	(#)	None
Vacuum street sweepers specified in contracts	(y/n)	No

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	100 lbs.
▪ Herbicides	(lbs. or %)	4 gals.
▪ Pesticides	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl	33%
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	67%
Pre-wetting techniques utilized	(y/n)	No

Manual control spreaders used	(y/n)	No
Automatic or Zero-velocity spreaders used	(y/n)	Yes
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No