Municipality/Organization:	Town of Middleborough, Massachusetts
EPA NPDES Permit Number:	MAR041134
MADEP Transmittal Number:	W-040722
Annual Report Number & Reporting Period:	No. 4: March 2006-March 2007

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: John F. Healey Title: Town Manager

Telephone #: (508) 947-0928 Email: jhly@middleborough.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: Marsha L Brunelle

Printed Name: Marsha Brunelle

Title: Chairman, Board of Selectmen

Date: 4-30-07

Part II. Self-Assessment

The Town of Middleborough, Massachusetts has completed the required self-assessment and has determined that, based on existing information, our municipality is in compliance with the conditions of the permit, with the exception of where implementation of our minimum control measures did not meet our stated schedule documented in our July 2003 Notice of Intent, as detailed in Part III.

Part III. Summary of Minimum Control Measures

Please see Table III, Summary of Minimum Control Measures located in Attachment A of this report. The town has retained the engineering services of Weston & Sampson to implement the remaining minimum control measures. A copy of the executed agreement is provided in Attachment B of this report.

Part IV. Summary of Information Collected and Analyzed

The town hired Weston & Sampson to complete an assessment of its municipal water, wastewater, and stormwater systems. The stormwater section of this Project Evaluation Report (PER) contains valuable information relating to the town's progress on compliance with the Phase II General Permit, including the minimum control measures. The stormwater section of the draft PER was submitted with previous annual reports to provide a more detailed representation of the town's efforts to date to control pollutants from being discharged to surface waters with its stormwater. Comments on the draft were received from the Massachusetts Department of Environmental Protection (MADEP) and a final report submitted for approval. The town is still awaiting final approval of this document from the MADEP; however the town has decided to proceed with implementation of those recommendations specifically relating Phase II General Permit to ensure that there is no lapse in compliance.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	***No.***
Annual program budget/expenditures	($)	***SW not separate budget.***

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	***CAC established; needs expansion.***
Stream teams established or supported	(# or y/n)	***No.***
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	***NA.***
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	***Wastes collected at town LF during all normal operating hours.***
▪ community participation	(%)	
▪ material collected	(tons or gal)	***Please see Attachment C.***
School curricula implemented	(y/n)	***None under this program.***

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination		***Note 1***		
▪ Erosion & Sediment Control	***Note 2***			
▪ Post-Development Stormwater Management	***Note 2***			
Accompanying Regulation Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination		***Note 1***		
▪ Erosion & Sediment Control	***Note 2***			
▪ Post-Development Stormwater Management	***Note 2***			

Notes: 1 Review and recommendations for revision of existing policies/procedures completed during Project Evaluation Report (PER).
2 Topic addressed in existing town policy, bylaws, ordinances, or other regulatory mechanism; however, review/revision specific to SWPhII required.

Mapping and Illicit Discharges

Outfall mapping complete	(%)	*25%*
Estimated or actual number of outfalls mapped	(#)	*21. This number reflects either pipe ends identified or mapping that indicates possible outfalls. Additional field verification required.*
System-Wide mapping complete	(%)	*10%*
Mapping method(s)		
▪ Paper/Mylar	(%)	*Record drawings exist for individual drainage projects and developments, but are not filed/catalogued. Approximately 90% of outfalls located during PER were mapped with GPS and added to town GIS system. Schematic (not GPS) mapping of known drainage components was added to town GIS via PER.*
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	*Initial wet-weather sampling attempted on14 outfalls; samples taken @ 10 outfalls.*
Illicit discharges identified	(#)	*None.*
Illicit connections removed	(#) (est. gpd)	*0*
% of population on sewer	(%)	*33%*
% of population on septic systems	(%)	*67%*

Construction

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

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	***2-3***
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	***2-3***
Total number of structures cleaned	(#)	***405***
Storm drain cleaned	(LF or mi.)	***NA***
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	***See Attach. D***
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		***LF***
Cost of screenings disposal	($)	***NA-town LF***
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	***2/yr***
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	***2/wk summer***
Qty. of sand/debris collected by sweeping	(lbs. or tons)	***See Attach. D***
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	***LF***
Cost of sweepings disposal	($)	***NA-town LF***
Vacuum street sweepers purchased/leased	(#)	***None***
Vacuum street sweepers specified in contracts	(y/n)	***NA***
Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Anti-/De-Icing products and ratios (% NaCl, % $CaCl_2$, % $MgCl_2$, % CMA, % Kac, % KCl, % Sand)	(%)	***100%NaCl***
Pre-wetting techniques utilized	(y/n)	***No***
Manual control spreaders used	(y/n)	***Yes***
Automatic or Zero-velocity spreaders used	(y/n)	***No***
Estimated net reduction in typical year salt application	(lbs. or %)	***NA.***
Salt pile(s) covered in storage shed(s)	(y/n)	***Yes***
Storage shed(s) in design or under construction	(y/n)	***NA.***

ATTACHMENT A

Table III
Summary of Minimum Control Measures

Table III
Summary of Minimum Control Measures

BMP ID#	Best Management Practice	Responsible Party	Measurable Goal	Progress on Goal - Permit Year Four	Planned Activities - Permit Year Five
1. Public Education					
1a	Distribute/post non-point source pollution poster	Town Manager	Post in all schools and town buildings	No activities were performed	Post in all schools and town buildings
1b	Air stormwater message on local cable access channel	Town Manager	Post one message every month	No activities were performed	Begin posting messages
1c	Obtain and distribute auto repair shop brochures	Town Manager	Distribute to all impacted local businesses	No activities were performed	Distribute notices to all impacted local businesses
1d	Add stormwater information to town's Website	Town Manager	Update information quarterly to address seasonal concerns	Waste collection/drop off and composting info. updated	Update information yearly
2. Public Participation					
2a	Expand Citizen's Advisory Committee	Town Manager	Hold quarterly meetings	CAC remains at 14; meetings were not held quarterly	Continue efforts to grow the CAC; hold bi-annual meetings
2b	Collect and recycle waste oil from residents	Highway Department	Collect waste oil at least once per month from residents	Waste oil collection and recycling was completed	Continue to collect and recycle waste oil from residents
2c	Collect paint from residents	Highway Department	Collect paint from residents on at least a quarterly basis	Paint collection was completed	Continue to collect paint from residents
2d	Implement a Catch Basin Stenciling Program	Town Manager	Stencil 25% of catch basins each year	No activities were performed	Stencil catch basins in prominent areas.
3. Illicit Discharge Detection and Elimination					
3a	Map outfalls and receiving waters	Town Manager	Map 25% of outfalls that drain urbanized areas each year	No activities were performed	Map remaining outfalls that drain to urbanized area
3b	Review existing bylaws and regulations	Planning Department	Determine if existing bylaws and regulations fulfill EPA requirements	Action recommended in final PER	Determine if existing bylaws and regulations fulfill EPA requirements
3c	Develop Illicit Discharge Detection & Elimination Plan	Planning Department	Make recommendations for inclusion into proposed plan	Action recommended in final PER	Make recommendations for inclusion into proposed plan
3d	Develop/Modify General Illicit Discharge Bylaw	Planning Department	Propose recommendations for modifying/developing bylaw	Action recommended in final PER	Propose recommendations for modifying/developing bylaw
4. Construction Site Runoff Control					
4a	Review existing site inspection practices	Planning Department	Determine if existing practices fulfill EPA requirements	Action recommended in final PER	Review existing site inspection practices
4b	Develop/modify site inspection program	Planning Department	Make recommendations for modifying existing program	Action recommended in final PER	Develop/modify site inspection program
4c	Review existing bylaws and regulations	Planning Department	Determine if existing bylaws and regulations fulfill EPA requirements	Action recommended in final PER	Review existing bylaws and regulations
4d	Develop/modify bylaw for construction site runoff	Planning Department	Propose recommendations for modifying/developing bylaw	Action recommended in final PER	Develop/modify bylaw for construction site runoff
5. Post Construction Runoff Control					
5a	Review existing site inspection practices	Planning Deparment	Determine if existing practices fulfill EPA requirements	Action recommended in final PER	Review existing site inspection practices
5b	Develop/modify inspection and maintenance practices	Planning Deparment	Made recommendations for modifying existing practices	Action recommended in final PER	Develop/modify inspection and maintenance practices
5c	Review existing bylaws and regulations	Planning Deparment	Determine if existing bylaws and regulations fulfill EPA requirements	Action recommended in final PER	Review existing bylaws and regulations
5d	Devleop/modify bylaws for post-construction site runoff	Planning Deparment	Propose recommendations for modifying/developing bylaw	Action recommended in final PER	Devleop/modify bylaws for post-construction site runoff
6. Municipal Good Housekeeping					
6a	Street sweeping program	Highway Department	Sweep all streets at a minimum twice per year	Street sweeping was completed	Continue to sweep all streets a minimum of twice per year
6b	Catch basin cleaning program	Highway Department	Check catch basins quarterly and clean up to twice per year	Catch basin inspection and cleaning was completed	Continue to check catch basins quarterly for sediment and clean every year

O:\Middleborough MA\SW Phase II\Annual Reports\No. 4 - May 07\[BMP Summary Table.xls]Sheet1

ATTACHMENT B

Agreement for Engineering Services
NPDES Phase II Stormwater Assistance

Middleborough, Massachusetts
WSE Project No. 76206.195

October 12, 2006

Mr. John F. Healey
Town Manager
Town Hall
10 Nickerson Avenue
Middleborough, Massachusetts 02346

Re: Agreement for Engineering Services - NPDES Phase II Stormwater Assistance

Dear Mr. Healey:

Following up on our recent discussion, Weston & Sampson Engineers, Inc. is providing this letter agreement for engineering services to assist the Town of Middleborough with its National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater permit compliance. As you know, the Town needs to stay in compliance with this regulation. Our scope of services, outlined below, will assist the Town with implementing the Best Management Practices (BMPs) listed in the Town's Notice of Intent (NOI) submitted to the Environmental Protection Agency and Massachusetts Department of Environmental Protection in July 2003 and get you on track with the requirements of the regulation.

Stormwater Outfall Mapping

Weston & Sampson will assist the Town with mapping of its stormwater outfalls in the "urbanized areas" of town, as defined by the NPDES Phase II Stormwater regulations (please see attached map). We will meet on-site with representatives from the Highway Department to identify locations of known drainage infrastructure, and review subdivision and utility drawings where necessary. Once identified, outfall locations will be recorded with a Global Positioning System (GPS) unit. Our proposal assumes that the town will provide assistance in locating drain lines and outfalls, and that GPS of outfalls can be completed in one day.

Locations of drain lines and outfalls will be added to the schematic drainage layer of the Town's Geographic Information System (GIS) already started by Weston & Sampson under a previous project, and we will assist the Information Technology Department with incorporating the updated drainage layer back into the Town's GIS system. We will also forward two hard copies of the updated drainage map.

Stormwater Management Regulations

Weston & Sampson will review the Town's existing bylaws, ordinances, and other regulatory mechanisms relating to stormwater in an effort to determine whether management requirements are being met. It is assumed that the Town will assist with identifying and providing copies of existing regulatory documents. Efforts will be focused on the following three specific stormwater pollution prevention topics, as listed in the 2003 NOI:

- Illicit discharge detection and elimination
- Control of construction site runoff
- Control of post-construction runoff

Public Education & Participation
Weston & Sampson will assist the Town with initiating Public Education & Participation tasks as identified in the 2003 NOI. Specifically, we will do the following:

- Deliver non-point source pollution posters to be placed by the Town in schools and municipal buildings.
- Provide waste oil use brochures to be distributed by the Town to local auto repair shops.
- Assist the town to develop stormwater educational messages that the Town can add to their website and air on local Cable Access Television.
- Purchase "Do Not Dump, Drains To River" stencils to be utilized by Town personnel and/or local volunteer groups to complete catch basin stenciling in the "urbanized area", or town-wide.

Municipal Good Housekeeping
Weston & Sampson will assist the Town with reviewing "good housekeeping" practices at public facilities as they relate to the prevention of stormwater pollution through personnel training and preparation for site visits to examine existing practices at municipal facilities. We will also review results from the site visits and, if appropriate, provide recommendations for modification of the existing practices.

Our lump sum fee for providing the engineering services described above is $34,500. All other terms and conditions shall be in accordance with our standard contract for engineering services between the Town of Middleborough and Weston & Sampson, as example reference dated August 9, 2004.

Providing that you agree with the scope of services and fee described herein, please sign below and return one copy to our office. If you have any questions on this matter, please contact Patricia C. Passariello, P.E. or me at (978) 532-1900.

ACCEPTED FOR:

WESTON & SAMPSON ENGINEERS, INC.

Michael J. Scipione, P.E.
President/CEO

TOWN OF MIDDLEBOROUGH, MA

Signature of Authorized Agent

Town Manager
Title

10/14/06
Date

ATTACHMENT C

Recycling Quantities

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention

2006 Municipal Recycling Data Sheet

For the calendar year ending December 31, 2006

7. Municipal Waste Diversion Program Results: Composting/Organics

Do not include leaves/yard waste collected from landscapers or adjoining towns, or organic materials collected by a municipal recreation department that maintains athletic fields.

Leaves/Yard Waste	1307.49	Tons of grass, leaves, branches from single family or multi-family collections (curbside or drop-off).
Christmas Trees	697 Each	Number of trees or tons chipped, ground, shredded or composted (if not included in Leaves/Yard Waste).

TOTAL number of compost bins EVER distributed by your city or town as of December 31, 2005: 239

Number of compost bins distributed in calendar year 2006: 3

If you DID NOT report diverting Leaves/Yard Waste & Christmas Trees, or distributing compost bins, MassDEP will estimate your default composting tonnage based on your answers to the questions below. If you have reported any of the above materials, please skip the rest of section 7 and go straight to section 8.

Does your community educate residents about and enforce a policy, bylaw, or ordinance excluding leaves and yard waste from collection for disposal? ☒ Yes ☐ No

Does your community have a combination of weekly drop-off and/or curbside collection for leaves and yard waste available to residents from March through November? ☒ Yes ☐ No

8. Residential Hazardous Household Products & Difficult-to-Manage-Wastes

A. **Reporting in Part A and Part B is mutually exclusive.** Please report the number of comprehensive one-day events your municipality sponsored or participated in during 2006. To avoid double counting, please **do not report tonnage collected during one-day events in Part B.** MassDEP will estimate tonnage based on the approximate numbers of full and half cars you report having served at these events.

Total number of comprehensive HHP events in 2006: 0

Approximate number of full cars served at these events: _____

Approximate number of half cars served at these events: _____

These collection events were ☐ Reciprocal ☐ Regional ☐ Open ☐ Other

B. If your municipality has ongoing material-specific collections **in addition** to the events reported in Part A, please report the amount collected in the units of measure requested. **Important Note:** Providing the amount(s) for these materials is OPTIONAL. However, if you do not have these figures to report, they will not count toward your municipal recycling rate. Report the number of days you collected these items, or the number of days your site was open to residents.

Material	Amount	Units	# of Collection Days	Collection Fee, if any
Auto Batteries	101	Number	260	$5.00
Auto Tires	3.73	Tons	260	$5.00
Batteries (Household)		5-Gallon Pails		$
CRTs/Electronics	36,000	Pounds	260	$15.00-$40.00 Each
Fluorescent Lamps/Bulbs		Linear Feet		$
Propane Tanks	145	Number	260	$5.00
Anti-freeze		55-Gallon Drums		$
Used Oil Filters		55-Gallon Drums		$
Latex/Oil Based Paint	8	Cubic Yard Boxes	158	$0.00

ATTACHMENT D

Catch Basin/Street Sweeping Quantities

CATCH BASINS/STREET SWEEPINGS
2006

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC		TOTALS
CATCH BASINS	14.40	38.96	89.29	46.41	27.37	59.67	0.00	6.48	2.76	10.48	7.73	39.85		290.04
STREET SWEEPINGS			101.30	154.74	105.44	12.07	0.00	0.00	15.27	0.00	17.30	0.00		406.12

CATCH BASIN/STREET SWEEPING
2007

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC		TOTALS
CATCH BASINS	1.42		6.97	30.99										39.38
STREET SWEEPINGS			34.81	127.09										161.90