05

TOWN OF AUBURN - TOWN ENGINEER

104 CENTRAL STREET • AUBURN, MASSACHUSETTS 01501

April 29, 2005

U. S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Re: NPDES Stormwater General Permit
2004-2005 Annual Report
Town of Auburn, MA

To Whom It May Concern:

Enclosed for your records is the NPDES Stormwater General Permit 2004-2005 Annual Report for the Town of Auburn, MA. The Annual Report has also been filed with the Massachusetts DEP.

If you have any questions or require any additional information, please do not hesitate to call me at 508-832-7728 or our Consultant, Kevin Read with Comprehensive Environmental Inc. at (508) 482-5557 ext. 359.

Sincerely,

Town of Auburn, Massachusetts

James Zingarelli

James Zingarelli
Town Engineer

Municipality/Organization: Town of Auburn

EPA NPDES Permit Number: MAR041088

MaDEP Transmittal Number: W-

Annual Report Number
& Reporting Period: No. 1: May 1, 2004-April 30, 2005

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: James Zingarelli Title: Town Engineer

Telephone #: (508) 832-7728 Email: jzingarelli@auburn.mec.edu

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.

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as completed the required assessment and determined that our municipality is in compliance with all permit

spect to historic properties has been assessed during this permit year. Auburn has verified that the MS4 outfalls
ct on the three historic properties list on the National Registry of Historic Places. This was done through visual
oric property.

Minimum Control Measures

nd Outreach

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
	Planning Dept., Conservation Commission, and Auburn Water District	Number of articles and copies of materials.	Education material was procured, adapted and mailed to residents as water bill inserts.	• Mail educational information to businesses and again to residents in water bill inserts. • The Town will develop more stormwater specific education materials.
ter	Planning Dept., MIS Office and Website Manager	Measure number of hits per quarter.	Town Staff is in the process of developing the stormwater section of the Town's website.	• Complete and update the stormwater section of the Town's website.
dcast cal	Phase II Stormwater Committee and Engineering	Cable TV tapes of shows.	EPA's "After the Storm" is scheduled to be broadcast in April 2005.	• Develop another presentation of Stormwater Management Plan. • Inform residents of stormwater broadcast during future selectmen meetings. • Show presentation at two selectmen meetings.
	Planning Dept., Conservation Commission and Auburn Water District	Copies of Articles.	Periodic newspaper inserts regarding Auburn Pond Cleanup and Hazardous Waste Cleanup Day.	• Develop format for quarterly news article. • Submit a quarterly article to the local newspaper regarding upcoming stormwater events.

s time.

: and Participation

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
	Planning Department and Conservation Commission	Cleaner streams as documented by before and after photographs	Advertised pond cleanup and had 4 citizens and a local Cub Scout Troop show interest in assisting with cleanup.	• Conduct stream and pond cleanup. • Document cleanup activities
:oom m	Planning Department, Auburn Water District, Sewer Commission and Conservation Commission	The classroom education program will be implemented by year 5.	• The Sewer Superintendent will serve as the classroom education coordinator. • A stormwater education program has been discussed with the Auburn Superintendent of Schools.	• Stormwater related curriculum will be developed for the classroom • Work with schools to determine how to best implement the program. • Train volunteers to present the stormwater information.
vater	Phase II Stormwater Committee	Document quarterly meetings.	This task will be completed in Permit Year 3.	• Help establish a volunteer stormwater organization. • Identify stakeholders and coordinators. • Meet on a quarterly basis to discuss Phase II management plan implementation status/issues.

ear 3.

tection and Elimination

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
ɔrm p	Highway Department and Engineering	All outfalls mapped by year 5.	• A storm drain system map was developed using historical mapping projects, existing plans, and knowledge of town employees. • A GIS base map and database for the Auburn storm drain system was created. • The storm system outfalls in highest priority sub-basins are in the process of being located and field-verified. • Outfall information and receiving water information is in the process of being added to the existing GIS base map.	• Complete field verification of the storm system outfalls in the highest priority basin. • Locate and field verify storm system outfalls in the moderate-high priority sub-basins. • Locate and field-verify storm system outfalls in moderate priority sub-basins. • Add outfall information and receiving water information to existing GIS base map.
ition	Planning Department and Board of Health	Obtain authorization to control inputs to the municipal system drainage system. Bylaw at Town meeting by end of year 3.	• A draft Illicit Discharge Prohibition Bylaw has been completed. • The Board of Health has also looked into adding illicit discharge prohibitions to the Title V regulations, which are currently under review.	• Finalize the Illicit Discharge Bylaw. • Present draft to public. • Submit bylaw for Town Meeting.
ion ?lan	Highway Department and Board of Health	All outfalls examined by year 4. Sources traced and conclusion documented within one year of discovery.	• An illicit discharge detection plan is in the process of being developed. • Sampling of dry weather flows outfalls in the highest priority sub-basins have begun.	• Complete an illicit discharge detection plan. • Finish inspecting outfalls and sampling of dry weather flows at stormwater outfalls in the highest priority sub-basin.

licit ublic	Highway Department and Board of Health	Copies of materials.	Illicit discharge education material was procured, adapted and mailed to residents as water bill inserts.	Incorporate public education materials on hazards associated with illegal discharges and improper disposal of waste with public education program.
lous ;	Highway Department and Board of Health	Document quantity of wastes collected annually.	A Hazardous Waste Collection Day was not held this Permit Year but one is scheduled for Fall 2005.	Organize collection events and advertise with public education materials, emphasizing the need to collect wastes to avoid improper disposal and the resulting pollution.
ent to	Planning Department and Engineering	Log of complaints and actions taken.	• Currently the Highway Department or the Board of Health receives stormwater related calls. The Land Use Enforcement Officer will handle calls once that position has been established. • The stormwater section of the Town's website advertises whom to call to report dumping or other inappropriate inputs into the MS4. • Complaints are handled on an individual basis.	• Continue to advertise whom to call to report dumping or other inappropriate inputs into the MS4 on the stormwater section of the Town's website. • Develop protocol for addressing complaints. • Keep records of complaints and actions taken.

licit Discharge Detection & Elimination at this time.

tormwater Runoff Control

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
n	Planning Department and Selectmen	Bylaw at Town meeting by end of year 2.	A draft Erosion Control Bylaw has been developed. This bylaw combines erosion and sedimentation controls and post-construction stormwater controls.	• Finalize Bylaw • Present draft to public. • Submit Bylaw for Town meeting.
; for	Planning Department, Highway Department, Engineering and Consultant	Inspection checklist and documented inspections.	• The Town has proposed to create a new position for a "Land Use Enforcement Officer" to coordinate stormwater management, enforcement and construction site/erosion control inspections. • Developed draft guidance outlining specific erosion control requirements. • Developed a draft inspection checklist.	• Finalize guidance outlining specific erosion control requirements desired by Auburn. • Develop a draft inspection checklist. • Set up a tracking program. • Conduct inspections of erosion controls.
ent to	Planning Department and Engineering	Record number of phone calls to hotline, copies of advertisements.	• Currently the Highway Department or the Board of Health receives stormwater related calls. The Land Use Enforcement Officer will handle calls once that position has been established. • The stormwater section of the Town's website advertises whom to call to report dumping or other inappropriate inputs into the MS4. • Complaints are handled on an individual basis.	• Continue to advertise whom to call to report dumping or other inappropriate inputs into the MS4 on the stormwater section of the Town's website. • Develop protocol for addressing complaints. • Keep records of complaints and actions taken.

is time

Stormwater Management in New Development and Redevelopment

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
	Planning Department and Selectmen	Bylaw at Town meeting by end of year 2.	A draft Post-Construction Stormwater Control Bylaw has been developed. This bylaw combines erosion and sedimentation controls and post-construction stormwater controls.	• Finalize Bylaw • Present draft to public. • Submit Bylaw for Town meeting.
sign	Planning Department, Engineering and Consultant	Copy of design standards.	• Specific BMP requirements desired by Auburn are included in the Stormwater Bylaw and regulations. • Developed draft design standards for developers to follow including design performance criteria, BMP examples, and maintenance requirements. • Set up review criteria. • Incorporated by reference in bylaws.	Finalize design standards for developers to follow including design performance criteria, BMP examples, and maintenance requirements.
tion	Planning Department, Engineering and Consultant	Retain copies of maintenance reports received annually, plus records of inspections completed and results.	• The Land Use Enforcement Officer will perform inspections. • O&M requirements are included in the Stormwater Regulations	• Setup a permit program and maintenance tracking program that requires annual submittal of maintenance reports by owner. • Conduct post-construction stormwater control inspections for sites where no annual report is submitted. • Require operation and maintenance plan of developers.
:e	Planning Department and Zoning Board of Appeals	The new zoning bylaw will be implemented by the end of year 1.	The Aquifer and Watershed Protection Overlay District is in the process of being rewritten. This bylaw deals with impervious surfaces in the overlay district.	Complete the rewrite of the Aquifer and Watershed Protection Overlay district section of the Zoning Bylaw with improvements in reducing impervious area.

w	Tree Warden	Adopt a Tree Preservation Bylaw by the end of year 3.	Scheduled for year 3.	• Develop a tree preservation bylaw. • Submit bylaw for Town Meeting.

Construction Runoff Control BMPs.

ı and Good Housekeeping in Municipal Operations

ı	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
	Highway Department	Priority plan of sweeping based on water quality impact. Volume of sweepings collected.	• All of the streets and sidewalks were swept once this year. • Volume collected: 8,000 yards	Sweep all streets.
ıs	Highway Department	Records of catch basins cleaned.	• 500 catch basins were cleaned this year based on a prioritization determined by the Town's Highway Department. • Volume collected: 1,000 yards	• Clean all catch basins in Town annually or as required by a prioritization scheme & schedule. • Record sediment collected per catch basin or drainage network each cleaning.
ıent	Highway Department	Prevent over-application of salt as shown with calibration records.	The Highway Department uses a 3 to 1 sand/ salt ratio on the Town's roads. The amount of mixture applied is controlled inside the cab of the truck. The employee uses experience and best judgment to determine how much of the mixture to apply.	Same as Year 2.
of	Highway Department	Use low salt ratio throughout town.	Continued the existing practice of low salt ratio application throughout town to protect groundwater and surface water resources.	Same as Year 2.

ction Plan	Highway Department and Engineering	Records of inspections and maintenance.	• An in-house policy for disposing of maintenance generated wastes (i.e. catch basin cleanings, street sweepings, and sediment from detention ponds has been implemented. The Highway Department met with the Board of Health and the DEP to determine a suitable location for storage of the wastes. The wastes are brought to Rochdale Street and stored away from any water bodies and off of the landfill cap. • A written yearly BMP maintenance schedule was developed.	Perform inspection and maintenance, modifying frequency as necessary.
ality e ood	Highway Department and Engineering	Document flood control projects	No flood projects were completed during this permit year.	Auburn Pond will be lowered so a portion of the dam can be fixed. There will be a clean up day for the public to participate in to improve the water quality of the area.
loor	All Town Departments	Written policy.	• Discontinued outdoor vehicle washing at the highway garage. • Verified that all garage drains are attached to a gas trap which discharges to the sanitary sewer system. The gas trap is cleaned once per year. • The Town has complied with federal and state regulations pertaining to vehicle washing and rinsing.	No further action is required for the rest of the permit term.
at age the ay and orage	Highway Department	Before and after photographs. Records of sweeping and catch basin cleaning.	• The sand pile and raw material piles have been relocated away from the stream. • The yard and catch basins were cleaned frequently.	• Sweep the yard and clean catch basins frequently. • Document sweeping and catch basin cleaning.

	All Town Departments	Cover all junk equipment and vehicles.	All junk equipment and vehicles have been provided covers and drip pans.	Same as Year 2.
lous	All Town Departments	Keep a record of drum disposal.	All drums are stored indoors until they can be disposed.	Same as Year 2.
	Highway Department	Record inspections.	• Dumpsters have been inspected. • Temporary covers were provided for the dumpsters.	• Develop a written inspection checklist for dumpsters. • Inspect dumpsters yearly to ensure there are no leaks.
ols	Highway Department	Copies of policies.	New policies were sent to Town employees, such as the new vehicle washing policy banning outdoor washing of vehicles.	• Develop written policies for all municipal operations. • Send policies to all town employees.
vater	Highway Department and Engineering	Attendance sheet and copy of program.	• The Fire Department has under gone training for spill containment. • The Stormwater Committee will coordinate training for Town Departments. • An agenda for Stormwater Training for the Highway Department has been completed. • Stormwater Training for the Highway Department will take place in April 2005.	• Conduct annual stormwater training sessions for Town departments.

d Housekeeping BMPs.

Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

n	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
or	Town Engineer & Consultant	Summary of existing pollution prevention efforts, future needs, and responsible parties. Copy of Surface Water Quality Strategic Plan.	Not planned for Year 2.	Not planned for Year 3.
ity	Town Engineer, Consultant, & Town Departments (to be determined)	Photographs, logs, and BMP descriptions for completed efforts and water quality improvements.	Not planned for Year 2.	Not planned for Year 3.

Ps at this time for compliance with TMDLs.

mpleted for Auburn Pond, Eddy Pond, Leesville Pond, Pondville Pond, and Stoneville Pond. The BMPs in minimum measures 1 first. These include measures recommended by the TMDLs such as public education, fostering volunteer watershed groups, street ing and mapping outfalls. Once these basic BMPs are functioning it will be possible to assess their effect. Then the water quality additional measures taken as necessary.

Information Collected and Analyzed

lverts were cleaned.
terial was removed from storm sewer structures.
eet sweepings were collected.
rom water billings
r Auburn Pond Cleanup
newspaper clippings.

puts & Accomplishments (OPTIONAL)

nt position created/staffed	(y/n)	
/expenditures	($)	

nt, and Training

sidents reached by education program(s)	(# or %)	
nt committee established	(y/n)	**Yes**
d or supported	(# or y/n)	
cipation or quantity of shoreline miles cleaned	(y/n or mi.)	
Waste Collection Days		
	(#)	
icipation	(%)	
d	(tons or gal)	
nented	(y/n)	

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Status (indicate with "X")				
Detection & Elimination			X	
nent Control			X	
ent Stormwater Management			X	
ion Status (indicate with "X")				
Detection & Elimination			X	
nent Control			X	
ent Stormwater Management			X	

ischarges

te	(%)	**100%**
ber of outfalls	(#)	
complete	(%)	**100%**
	(%)	
	(%)	
	(%)	**100%**
ned	(# or %)	
ed	(#)	
ved	(#) (est. gpd)	
er	(%)	
tic systems	(%)	

ı starts (>1-acre)	(#)	
f construction starts adequately regulated for erosion and sediment control	(%)	
ted	(# or %)	
ers issued	(# or %)	
	(# and $)	
ceived from public	(#)	

ormwater Management

f development/redevelopment projects adequately regulated for post-er control	(%)	
ted	(# or %)	
ormwater recharged	(gpy)	

tenance

atch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	**Every other year, or as needed**
atch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	**Every other year, or as needed**
ures cleaned	(#)	**500**
	(LF or mi.)	**>500**
is removed from storm sewer infrastructure	(lbs.or tons)	**1000 yards**
epings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
osal	($)	

:reet sweeping (non-commercial/non-arterial streets)	(times/yr)	**1/year**
:reet sweeping (commercial/arterial or other critical streets)	(times/yr)	**1/year**
ected by sweeping	(lbs.or tons)	**8,000yards**
landfill, POTW, compost, beneficial use, etc.)	(location)	
osal	($)	
s purchased/leased	(#)	
s specified in contracts	(y/n)	

n on public land of: ("N/A" = never used; "100%" = elimination)		
	(lbs. or %)	
	(lbs. or %)	
	(lbs. or %)	

s and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	**3:1 Sand to Salt ratio**
utilized	(y/n)	
rs used	(y/n)	**Yes**
city spreaders used	(y/n)	
n in typical year salt application	(lbs. or %)	
torage shed(s)	(y/n)	**Yes**
gn or under construction	(y/n)	