Municipality/Organization: **Town of Ludlow**

EPA NPDES Permit Number: **MA041014**

MaDEP Transmittal Number: **W-036097**

Annual Report Number
& Reporting Period: No. 3: May 1, 2005-April 30, 2006

MAY 10 2006

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Paul Dzubek Title: Director of Public Works

Telephone #: (413) 583-5615, ext. 15 Email: pdzubek@ludlow.ma.us

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: Thomas Haluch

Printed Name: Thomas Haluch

Title: Chairman – Ludlow Board of Public Works

Date: 5/1/06

Part II. Self-Assessment

The Town of Ludlow has completed the required self-assessment of compliance with the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of the Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The results of the self-assessment concluded that the Town of Ludlow is in compliance with the Phase II Stormwater Program.

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
1a.	Create website links	DPW	Post links to EPA & DEP stormwater information	Links to DEP and EPA Stormwater information posted on Town of Ludlow website and DPW website.	Update links as necessary and continue EPA and MA DEP stormwater information links.
Revised					
1b.	Make Stormwater Management Plan available.	DPW	Have Plan copies available at Town Hall, Library & DPW	The plan is available.	Keep copies of the plan available & update as necessary.
Revised					
1c.	Use Arbor Day for publicity.	DPW	Distribute stormwater information	A proclamation with a stormwater message was published and posted. (Approximately 60 students received information on 4/28.)	Use this annual event for distribution of stormwater information. Document # of participants.
Revised					
1d.	Hold a household hazardous waste collection day.	DPW	One collection per year.	A household hazardous waste day was held in September 2005. 27 Ludlow Residents participated in a regional event in September.	A household hazardous waste collection day is scheduled for September 2006. Document # of participants.
Revised					
1e.	Cable access bulletins.	DPW	Air 4 bulletins per year.	Bulletins aired May, July, September & March	Continue to run bulletin and update with upcoming stormwater related events.
Revised					
Revised					

1a. Additions

1f.	Door hanger Distribution	DPW	Distribute Stormwater Info 1 time/yr	Distributed ~500 stormwater information door hanger	Plan day & recruit volunteers to distribute door hangers
Revised					
1g.	Scout Outreach	DPW	Conduct two Informational Meetings per year	Information meetings were conducted with two boy scout/cub scout packs. Meetings conducted in June and August 2005.	Hold at least two informational seminars/meetings with boy scout/girl scout groups during the summer months. Continue Information meetings were conducted with two boy scout/cub scout packs.
Revised					

Please note Item 1g was previously 2e. Based on the results of activities conducted in Permit YR II the activities were adjusted to the appropriate locations.

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
2a.	Form a stormwater committee.	Selectmen	Begin meeting.	Stormwater Committee held three meetings in YR III.	Continue to hold regular committee meetings. Post meeting minutes on DPW website.
Revised					
2b.	Develop stormwater bylaws.	Stormwater Committee	Public hearing held.	Public Hearings for General Stormwater Management Bylaw held September 20, 2005. Five residents attended.	Hold public hearings in August/September 06 to revise/update general bylaw for October 2006 Town meeting.
Revised					
2c.	Develop a catch basin stenciling program.	DPW	Number of catch basins selected.	Stenciling program developed. Approximately 500 cabins stenciled.	Continue stenciling program and recruit volunteers.
Revised					
2d.	Town Meeting consideration of Bylaws.	Selectmen	Recorded vote of Town Meeting.	Draft bylaw adopted October 2006.	Revise/Update bylaw as necessary.
Revised					
2e.	Scout participation	DPW	Organize Day for Scout Participation	DPW worked with local scout group to distribute information and stencil storm drains during August & September 2005.	Continue to recruit scout troop(s) to deliver educational materials to community members during scouting activities.
Revised					
Revised					

2a. Additions

No additions at this time.

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
3a.	Draft a drainage system bylaw.	Stormwater Committee	Draft bylaw ready for Town Meeting in year 2. Record Vote	Draft bylaws was developed through a Smart Growth Technical Assistance Grant. Not placed on October 2005 Town meeting. No vote taken	Submit bylaw to October 2006 Town Meeting for consideration.
Revised					
3b.	Map the MS4.	DPW	Completed map.	Continue to update map as additional segments are added. Continue field verification and inspection project.	Continue map updates and outfall and receiving water inspections to identify high priority area.
Revised					
3c.	Accidental Spill Prevention – Sight Distance Improvement	DPW	Reduce one sight distance hazard per year	Design plans completed for West St Sight Distance Improvement Project.	Construction of West St Sight Distance Improvement Project slated to begin June 2006. Compete design of sight distance improvement for street with greatest traffic volumes and major trucking routes.
Revised					
Revised					
Revised					

3a. Additions

No additions at this time.

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
4a.	Develop construction site runoff control regulations.	Stormwater Committee	Interdepartmental policy in place	General Stormwater Bylaw adopted in October 2005. Encompasses development construction activities.	Revise/update bylaw to include more stringent enforcement options for violations.
Revised					
4b.	Multi-Departmental Pre-Project Release Form	Building Department	Institute Multi-Department Release Form	Draft form adopted in October 2005.	Revise/update development form as needed.
Revised					
Revised					
Revised					
Revised					
Revised					

4a. Additions

4c.	Pre-Construction Stormwater Permit	Planning Department	Record number of Permits Filed	Stormwater Permit process developed and implemented October 2005. Nine permits filed and reviewed since implementation.	Continue to review permits and site plans for adequate stormwater controls for any constriction activity.
Revised					

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
5a.	Adpot bylaw.	Stormwater Committee	Prepare for Town Meeting.	Revise General Stormwater Bylaw adopted in October 2005. Encompasses development construction activities.	Revise/update bylaw to include more stringent enforcement clauses for violations.
Revised					
5b.	Detention/Retention/Infiltration Basin Inspections	DPW	Inspection Log	Due to budget constraints no activities completed in Permit YR III.	Develop inspection program for all detention, retention, and infiltration basins to ensure proper function during future storm events.
Revised					
Revised					
Revised					
Revised					
Revised					

5a. Additions

No additions at this time.

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
6a.	Clean catch basins.	DPW	Clean all catch basins once per year.	All catch basins were cleaned.	All catch basins will be cleaned.
Revised					
6b.	Sweep streets.	DPW	Sweep all streets.	All streets were swept.	All streets will be swept subject to funding.
Revised					
6b.	Municipal Employee Training Program.	DPW	Institute a Stormwater Awareness Program for all Public Works Employees.	One public awareness training seminar held in September 2005.	Continue to conduct at least two stormwater awareness workshop per year for DPW employees.
Revised					
6c.	Municipal Facility Assessment	DPW	Develop detailed map of all municipal facilities, identify receiving waters, conduct clean up operations of all facilities.	DPW yard area plan developed. Additional municipal facility mapping in progress.	Continue mapping program for each municipally owned facility.
Revised					
6d.	Management Education	DPW	Remain up-to-date with current Stormwater policies and regulation.	At least two stormwater seminars attended by all staff.	Attend Stormwater management classes and/or seminars, 2 per year minimum.
Revised					
Revised					

6a. Additions

6e.	Truck Wash	DPW	Construct Truck Wash facility		Plans will be developed to provide an updated truck wash facility. Construction to begin in late 2006/early2007
6f.	Catch Basin Replacement	DPW	Document No. of Catch Basins Replaced		Replace existing non deep sump, non-hooded catch basin with deep sump and hood catch basins throughout urbanized area.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
7a.	Map drainage to Minnechoag Pond.	DPW	Document drainage to pond & identify all possible sources.	The drainage to Minnechoag Pond has been mapped.	Investigate potential pollutant sources. Develop BMP once sources are identified.
Revised					
7a-1.	Reconstruct drainage system to Minnechoag Pond from East Street.	DPW	Reduce sediment load reaching the pond from a major street via flow from a substantial discharge.	25% design plans completed and sent to MassHighway Department for review. Confirmation of funding received through state legislature. Environmental Permitting Completed by MassDEP	Continue Work closely with consultant to design the drainage system to remove sediment load to Minnechoag Pond.
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

No additions at this time.

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No significant amount of information has yet been collected.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	No	
Annual program budget/expenditures	~$45,000	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	1500	
Stormwater management committee established	Yes	
Stream teams established or supported	No	
Shoreline clean-up participation or quantity of shoreline miles cleaned	No	
Household Hazardous Waste Collection Days		
▪ days sponsored	1	
▪ community participation	21	
▪ material collected	525 gal.	
School curricula implemented	No	

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	60%	
Estimated or actual number of outfalls	~200	
System-Wide mapping complete	95%	
Mapping method(s)		
▪ Paper/Mylar	100%	
▪ CADD	50%	
▪ GIS	50%	
Outfalls inspected/screened	~10	
Illicit discharges identified	0	
Illicit connections removed	0	
% of population on sewer	60%	
% of population on septic systems	40%	

Construction

Number of construction starts (>1-acre)	~20	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%	
Site inspections completed	~100	
Tickets/Stop work orders issued	1	
Fines collected	$0	
Complaints/concerns received from public	~10	

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)	1 times/yr	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	1 times/yr	
Total number of structures cleaned	~1000	
Storm drain cleaned		
Qty. of screenings/debris removed from storm sewer infrastructure	~1200 yd	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Landfill	
Cost of screenings disposal	$	

Average frequency of street sweeping (non-commercial/non-arterial streets)	1 times/yr	
Average frequency of street sweeping (commercial/arterial or other critical streets)	1 times/yr	
Qty. of sand/debris collected by sweeping	~900 yd	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Compost	
Cost of sweepings disposal	$25,000	
Vacuum street sweepers purchased/leased	1	
Vacuum street sweepers specified in contracts	Yes	

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	45% NaCl 5% $CaCl_2$ 0% $MgCl_2$ 0% CMA 0% Kac 0% KCl 50% Sand	
Pre-wetting techniques utilized	Yes	
Manual control spreaders used	Yes	
Automatic or Zero-velocity spreaders used	No	
Estimated net reduction in typical year salt application	0	
Salt pile(s) covered in storage shed(s)	Yes	
Storage shed(s) in design or under construction	No	

Department of Public Works
The Town of Ludlow, Massachusetts

May 1, 2006

MAY 10 2006

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

Re: Town of Ludlow – MA041014
MS4 Phase II Annual Report
Permit Year III

Dear Sirs/Madams,

Enclosed please find a copy of the NPDES Phase II Small MS4 Annual Report for the Town of Ludlow.

Sincerely,

Paul Dzubek, P.E.
Director of Public Works

Cc: Division of Watershed Management

198 Sportsmen's Road, Ludlow, Massachusetts 01056 Tel. 583-5625 (garage 583-5626) FAX 589-1488