City of Lowell
ENGINEERING DEPARTMENT
Stephen M. Curran, City Engineer

April 26, 2005

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

Subject: Lowell, Massachusetts (NPDES# MA041205)
NPDES Phase II Small MS4 General Permit – Second Annual Report (2005)

Dear Sir/Madam:

The City of Lowell, Massachusetts is pleased to submit this Second Annual Report for coverage under the EPA's National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) for the period from April 2004 to March 2005.

We trust that this Annual Report meets the compliance requirements of the Phase II Stormwater Rule General Permit conditions. Please do not hesitate to contact me at (978) 970-3331 if you have any questions regarding this submittal.

Sincerely,

Stephen Curran, P. E.
City Engineer

cc: Edward Walsh, Comm. Department of Public Works
Mark Young, Exec. Dir LRWU
Thomas Bellegarde, Comm. Parks
Matthew Coggins, Dir. DPD
Adam Baacke, Chief Planner
Christine Thomas, Admin. Conservation Comm.
Michael Demaras, Coor. DNS
James Drake, CDM

City Hall - 375 Merrimack Street - Room 61 - Third Floor - Lowell, MA 01852
Tel. (978) 970-3330 - Fax. (978) 970-3332 - E-Mail: Scurran@ci.lowell.ma.us

Municipality/Organization: City of Lowell, Massachusetts

EPA NPDES Permit Number: MA041205

MaDEP Transmittal Number: **W-040991**

Annual Report Number & Reporting Period: **No. 2: April 2004-March 2005**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Stephen M. Curran, P.E

Title: City Engineer

Telephone #: (978) 970-3331

Email: scurran@ci.lowell.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:

Printed Name: John Cox

Title: City Manager

Date:

Part II. Self-Assessment

The City of Lowell has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
1.1	Hold annual Earth Day Celebration	Neighborhood Services Department	Event Held	Earth Day held on April 25, 2004. City notified the public about 3 months in advance by newspaper, local access TV and distributed about 500 flyers.	Hold 2005 Celebration. City will distribute stormwater flyers during 2005 Celebration
1.2	Develop and Distribute Stormwater Brochure	Department of Public Works (DPW)	Develop stormwater brochure in Year 1 and distribute in Year 2	City adopted the EPA Brochure entitled "After the Storm" for stormwater education in the City. About 22,000 copies of the brochure were reproduced in March 2005. Approximately 2,000 brochures have already been distributed to the public. The brochure discusses various watershed activities that can influence stormwater runoff volume and quality including Vehicle/Garage Care; Lawn/Garden Care; Home Repair/Improvements; Pet Care; Swimming Pool and Spa Care; Septic System Use. Copies of the EPA brochure are/will be available to the public at City Hall; DPW; Water Plant; Wastewater Plant; City Clerks Office; City Hall; Public Libraries; Division of Planning & Development; Neighborhood Services Department.	Copies of the Stormwater Brochure will be maintained and replenished at the public distribution sites as needed. City will consider how to coordinate/develop a school education program with Middle and High School Science Teachers.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
1.3	Enhance Awareness of Proper Pet Waste Disposal at City Parks	City Clerk, Parks Dept.	Pet Waste Brochure developed in Year 2; and distributed to all licensed dog owners in Years 3-5. Pet waste signs to be installed at City Parks in Years 2-5.	The Stormwater Brochure (discussed above) includes educational information on Pet Care. Flyers discussing the Animal Control Ordinance are available at DPW and posted on signs at the City's parks. Lowell maintains at least 75 signs and added another 40 signs at City parks posting the Animal Control Ordinance.	Continue to maintain supply of Stormwater Brochures. Coordinate with City Clerks Office to ensure awareness of Animal Control Ordinance.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
2.1	Comply with State Public Notification Guidelines	City Clerk; other City Dept.	Comply with State public notification guidelines	City posted all applicable meetings and environmental awareness events according to state guidelines including local access TV channel.	DPW to continuing developing website-based meeting notifications.
2.2	Hold Annual Household Hazardous Waste/Tire Collection Days	DPW	Hold hazardous waste collection day annually	Household Hazardous Waste Collection Day was held on April 30, 2004. The event was noticed in the local newspaper, on local access TV and on the City website. Notices were posted 3 months in advance. Approximately 1,000 residents participated in the event. DPW has the manifest of the household hazardous waste collected.	Hold 2005 Collection Day
2.3	Install Catch Basin Plaques	Lowell Regional Wastewater Utility	50 catch basin plaques installed each year	City installed plaques ("Do Not Dump – Drains to River" note) on 60 catch basins. City has noticed the public on this program on local TV and City website, distributed flyers in the neighborhoods, and local group meetings,	Using Lowell's Neighborhood Services Department, the City will consider coordination with local groups to assist in the catch basin stenciling program. At least 50 catch basins will be signed each year.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
3.1	Map Drain Outfalls and Receiving waters	City Engineering Department	Complete map of outfalls	**BMP Completed**	**BMP Completed**
3.2	Continue Inspections of New Sanitary Sewer Connections	City Engineering	Continue existing program	City inspected 180 new/updated sewer connections.	Continue inspections of new sewer connections.
3.3	Continue enforcement of illicit connection/ illegal dumping bylaws	City Engineering	Continue existing program	City enforced existing bylaws. Illicit connections/illegal dumping addressed as needed by the City. No violations were found.	Continue to enforce illicit connection/illegal dumping bylaws.
3.4	Dry weather screening of drain outfalls	City Engineering	All outfalls screened once during permit period	**BMP Completed**	**BMP Completed**
3.5	Develop and Implement System for Elimination of Illicit Discharges	DPW	Based on prioritized results in BMP#3.4, determine procedures to identify and remove illicit connections to drain; maintain records	City identified and removed one illicit connection during this permit period. City continued education/awareness of potential illicit connection issues.	City to continue program to identify and remove illicit connections.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
4.1	Continue to Apply Standard 8 of MA Stormwater Policy	Conservation Commission	Standard 8 of MSP applied	City requires all projects to employ erosion control methods. Approximately 33 projects were reviewed that incorporated stormwater management procedures.	Continue enforcement of Standard 8 for proposed development projects in the City.
4.2	Continue to Inspect/Maintain Control Measures at Construction Sites	City Engineer	Continue Existing Program	City Engineer's Office inspects all sites daily while construction activity is going on. Any activities that needed to be addressed were brought to the attention of the site developer immediately, corrective action was taken and the site was re-inspected. No violations were reported.	Continue City's Site Inspection Policies.
4.3	Continue to Enforce procedures for collection/filing of public comments	City Engineer/ City Clerk	Continue Existing Program	City Clerk keeps public comments on file. When complaints are received, City Engineer's Office responds immediately. No violations were reported.	City to consider the purchase of complaint tracking software to make it easier to log and track complaints in the future.
4.4	Develop and present an Ordinance for Erosion Control Measures and Construction Material Management for Construction Sites more than 1-acre.	City Engineer	Draft Ordinance language and present to City Council for approval	City continued the process of revising Rules and Regulations governing site developments and erosion control. Currently, the City Engineer and Planning Board have enforced erosion control measures for all projects that have come under their review for the last seven years.	Planning Board to complete revisions to Rules and Regulations that adopt formal guidelines for erosion control for developments of one acre or more. Approval of the Rules and Regulations is dependent on City Council vote.

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 2 (2004) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3 (2005)
5.1	Continue application of Planning Board Rules and Regulations for Subdivisions	City Engineering	Continue enforcement of existing regulations	City has enforced Rules and Regulations for all projects that have come under its review. Thirty-one (31) projects were reviewed last year.	Continue enforcement of existing Rules and Regulations. Revise accordingly – see BMP 4.4.
5.2	Apply Standards 2, 3, 4, 7 and 9 of MA Stormwater Policy to the entire City	City Engineering	Develop/Incorporate modifications to existing regulations as needed	City Engineer's Office and Planning Board have enforced erosion control measures for all projects that have come under their review for the last seven years. Planning Board is in the process of revising its Rules and Regulations. City expects to incorporate formal reference to the MA Stormwater Policy Standards.	City to complete revisions to Rules and Regulations. Approval of the Rules and Regulations is dependent on City Council vote.
5.3	Develop/Implement Ordinance/Regulation to ensure long-term maintenance of private structural BMPs.	City Engineering	Draft Bylaw developed and presented to City Council	City enforces stormwater management in all projects that come under its review. Each development that incorporates a private BMP must submit an Operations and Management Plan for the BMP.	City to complete revisions to Rules and Regulations. Approval of the Rules and Regulations is dependent on City Council vote.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6.1	Continue Street Sweeping Program	DPW	Percentage of streets swept annually with emphasis on sensitive receptors	City maintained its current street sweeping and residuals disposal program schedule. More than 90% of streets were swept.	Continue existing program.
6.2	Continue Catch Basin Cleaning Program	Lowell Regional Wastewater Utility	Percentage of catch basins cleaned annual; with emphasis on sensitive receptors	City maintained its current catch basin cleaning and residuals disposal program schedule. Approximately 20% of catch basins were cleaned.	Continue existing program.
6.3	Continue Salting and Snow Removal Practices	DPW	Continue existing programs for salt storage/use and management, especially in sensitive areas	City continued its existing salt storage/snow removal practices. No changes are noted. Records of salt use are kept by DPW. City continued to consider salt reduction methods and used deicing alternatives whenever practical.	Continue existing program.
6.4	Continue Vehicle Washing Practices	DPW	Continue existing program in DPW yard	City vehicles were washed in approved areas.	Continue existing program. Modify practices as necessary to minimize stormwater impacts.
6.5	Continue Vehicle Maintenance	DPW	Continue existing program in DPW yard	City vehicle maintenance was performed in approved areas. Vehicle material waste was disposed of off-site by approved waste handlers.	Continue existing program. Modify practices as necessary to minimize stormwater impacts.
6.6	Park and Landscape Maintenance	Parks Department	Minimize herbicides, pesticides, fertilizers in sensitive areas; maintain records	The City only applies fertilizers to areas with irrigations systems. Records of fertilizer/herbicide/pesticide use are maintained by the Parks Department. The City has reduced its use of fertilizers to improve stormwater quality.	Continue existing program. City to continue to examine existing fertilizer practices and make revisions as necessary to minimize impact to stormwater runoff and receiving streams.
6.7	Employee Education Program	DPW	Four hours of training on stormwater topics per permit term	City reviewed potential training materials.	City to initiated training of employees on stormwater impacts during this period.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

BMP ID #	BMP Description	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
Not Applicable					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

N/A