

TOWN OF ANDOVER, MASSACHUSETTS

JACK PETKUS, P.E.
DIRECTOR



1178

TELEPHONE
(978) 623-8350

FAX
(978) 623-8359

DEPARTMENT OF PUBLIC WORKS

WATER TREATMENT PLANT
397 LOWELL STREET 01810-4416

05

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 Andover, MA**

To Whom It May Concern:

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

If you have any questions or require any additional information, please do not hesitate to call me at 978-623-8350 ext. 520 or our Consultant, Rebecca Balke with Comprehensive Environmental Inc. at (800)725-2550 ext. 308.

Sincerely,

Town of Andover, Massachusetts

Brian Moore, P.E.
Town Engineer

cc: Massachusetts Department of Environmental Protection, Worcester Office
Rebecca Balke, Comprehensive Environmental Inc.

Enclosure – NPDES Phase II Small MS4 General Permit 2004-2005 Annual Report



TOWN OF ANDOVER, MASSACHUSETTS

JACK PETKUS, P.E.
DIRECTOR



TELEPHONE
(978) 623-8350

FAX
(978) 623-8359

DEPARTMENT OF PUBLIC WORKS
WATER TREATMENT PLANT
397 LOWELL STREET 01810-4416

April 29, 2005

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

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

To Whom It May Concern:

Enclosed for your records is the NPDES Stormwater General Permit 2004-2005 Annual Report for the Town of Andover, MA. The Annual Report has simultaneously been filed with the U.S. Environmental Protection Agency.

If you have any questions or require any additional information, please do not hesitate to call me at 978-623-8350 or our Consultant, Rebecca Balke with Comprehensive Environmental Inc. at (800)725-2550 ext. 308.

Sincerely,

Town of Andover, Massachusetts

Brian Moore, P.E.
Town Engineer

cc: U. S. Environmental Protection Agency, Boston Office
Rebecca Balke, Comprehensive Environmental Inc.

Enclosure – NPDES Phase II Small MS4 General Permit 2004-2005 Annual Report



Municipality/Organization: Town of Andover

EPA NPDES Permit Number: MAR041178

MaDEP Transmittal Number: W-041021

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: Reginald Stapczynski

Title: Town Manager

Telephone #: (978)623-8350

Email:

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:

Reginald S. Stapczynski

Printed Name: Reginald Stapczynski

Title: Town Manager

Date:

4/29/05

Part II. Self-Assessment

The Town of Andover has completed the required self-assessment of the annual compliance review for 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 Town has determined that our municipality is in compliance with all permit conditions. The Town received a letter on April 21, 2005 from the Massachusetts Historical Commission stating that existing stormwater outlet structures do not have any adverse effects on historic places within Town.

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 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1A	Develop Stormwater Section of Town Website	Department of Public Works/Engineering Dept., Water Dept, and Town Website Manager(s)	Measure number of hits over permit term.	Andover has developed a web page with stormwater information and links to other useful sites.	Measure hits to the website.
Revised					
1B	Distribute Brochures and Fact Sheets to Businesses and Residents	Department of Public Works/Engineering Dept., and Water Dept.	Number of articles and copies of materials.	<ul style="list-style-type: none"> The Town mailed 10,300 copies of the 2004 Drinking Water Quality Report that contained a page on stormwater facts to residents and businesses. 400 additional copies were made available in public buildings. An educational brochure, “Beautiful Lawns” was distributed to Town residents during information forums and citizens meetings. The brochure was also made available in public buildings. 	Continue mailings.
Revised					
1C	Submit Advertisements/Articles on Stormwater Protection for Local Newspaper	Department of Public Works/Engineering Dept., and Water Dept.	Clippings of articles and advertisements printed in local newspaper.	Articles were published in the local paper on stormwater issues facing Fish Brook, particularly elevated sodium levels. The article also mentioned the 8 th Grade Expeditionary Learning Project (see 2C).	Continue to inform residents of upcoming activities under the participation and involvement program. Use information from brochures and fact sheets for articles and direct the public to the stormwater section of the Town website.
Revised					

2. Public Involvement and Participation

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
2A Revised	Establish a Pesticide Reduction Task Force (PRTF)	Committee of Town Staff, League of Women Voters, and Residents	Copies of mailers, meeting minutes, list of attendees.	Monthly meeting were held. The PRTF has been merged with the Fish Brook Initiative (see 2E). One thousand signs were purchased to give to residents wishing to declare their lawns "pesticide free".	Continue holding meetings and encouraging new residents and business owners to attend.
2B Revised	Establish a Stormwater Telephone Hotline	Department of Public Works/Engineering Dept, Water Dept., and Town Website Manager(s)	Record number of phone calls to hotline, copies of articles.	A telephone hotline system is under development and is expected to be operational by May 2005.	<ul style="list-style-type: none"> Begin logging the calls and responses after the system is installed and functioning. Advertise the number and include a descriptive pamphlet about illicit discharges in utility bills. Provide a section on the Town's stormwater website discussing how people can use the hotline
2C Revised	Establish Classroom Education/Field Trip Program	Department of Public Works/Engineering Dept. Water Dept., and Education Department	Field Trip Curriculum, # of field trips organized each year.	Twenty tours were given for about 200 residents and students. Three classroom visits were completed and an Expeditionary Learning Project was established with the 8 th Grade class that included outdoor monitoring of Fish Brook. Stormwater information was incorporated into field trips and classroom visits.	Continue to visit classrooms and hold annual field trips for science classes to visit the Town's water treatment plant. Encourage class projects and activities related to stormwater issues.

2D	Install Storm Drain Markers or Stencils	Department of Public Works/Engineering Dept., Water Dept., and Volunteers	50 % of storm drains marked by year 5 with door hangers placed in associated neighborhoods.	<ul style="list-style-type: none"> Stormdrain markers and door hangers are scheduled for installation in subwatersheds L and K in spring/summer 2005 by Eagle Scout volunteers. Stormdrain markers have been scheduled for installation along Fish Brook by students of the Woods Hill School in May 2005. 	Continue marking storm drains in the highest priority watersheds.
Revised					
2E	Work With Watershed Organizations to Incorporate Stormwater Information into Their Programs	Department of Public Works/Engineering Dept., Water Dept., and Conservation Commission	Document quarterly meeting topics.	The Town participated in establishing the Fish Brook Initiative, a watershed protection committee that meets monthly. A Watershed Scientist was hired as the Director for the Conservation Department. The Director has met with the Fish Brook Initiative Committee and the Shawshen River Watershed Association.	Continue working with local watershed groups to discuss stormwater concerns.
Revised					

3. Illicit Discharge Detection and Elimination

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
3A	Develop Primary Town Storm Drain System Map	Department of Public Works/Engineering Dept., Consultant	90% of system mapped on GIS.	90% of the drainage system was mapped during permit year 1 using existing plans.	No further activity is required for this task.
Revised					

3B Revised	Complete Storm Drain System Map	Department of Public Works/Engineering Dept., Consultant	All outfalls mapped by year 4. Copy of storm drain map.	<ul style="list-style-type: none"> Continued to locate and verify storm system outfalls. Continued to locate and field verify unknown drainage areas. Added outfall information to existing GIS base map. The location of approximately 238 outfalls were entered into the GIS drainage map. About 200 of these outfalls have been located using GPS. 	Continue verifying the location of the drainage system as mapped under 3A and incorporate changes as needed. Time and manpower available may not allow for all outfalls to be located by Year 4.
3C Revised	Develop Illicit Discharge Prohibition Ordinance	Planning Board, Board of Health, and Selectmen	Obtain authorization to control inputs to the municipal drainage system. Bylaw at Town meeting by year 3.	Rules & Regulations are 95% complete. Proposed amendments anticipated to be adopted by June 2005.	The illicit discharge prohibition ordinance will be drafted after the Subdivision Rules and Regulations have been developed to ensure consistency.
3D Revised	Develop Illicit Discharge Detection and Elimination Plan and Implement Activities	Department of Public Works/Engineering Dept., Water Dept., Board of Health, and Consultant	All outfalls examined by year 4. Sources traced and results documented within one year of discovery.	<ul style="list-style-type: none"> IDDE plan was established in permit year 1. During ongoing outfall inspections two illicit discharge were discovered. The sources were found and removed from the stormwater system. Monthly sampling at Fish Brook commenced. 	Continue conducting outfall inspections and looking for signs of illicit discharges in priority subwatersheds. Seek sources of discovered illicit discharges one by one and work towards elimination.

3E Revised	Incorporate Information on Illicit Discharges into Public Education and Outreach Topics	Department of Public Works/ Engineering Dept., Water Dept., and Board of Health	Copies of materials.	<ul style="list-style-type: none"> Stormwater fact sheets were made available for residents at the water treatment plant and illicit discharge information was discussed during tours of the facility. Weekly broadcasts began on the local cable channel about healthy lawns and pesticide use. Presentation given on environmental pollutant's impact on Fish Brook as part of the Public Health Week activities. Held Title V seminar for general public including protocol systems design basics with video & questions. 	Continue incorporating information on illicit discharge into public education and outreach topics.
3F Revised	Setup and Advertise a Hotline for Illicit Discharges	Department of Public Works/ Engineering Dept., and Board of Health	Log of complaints and actions taken.	<ul style="list-style-type: none"> A telephone hotline system is under development and is expected to be operational by May 2005 (see 2B). 	<ul style="list-style-type: none"> Identify department to receive calls. Advertise who to call to report dumping or other inappropriate inputs to the MS4. Develop a protocol for addressing complaints. Keep records of complaints and actions taken.

4. Construction Site Stormwater Runoff Control

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
4A Revised	Develop Erosion Control Bylaw	Planning Board and Selectmen	Bylaw at Town meeting by year 3.	As part of the proposed Rules and Regulations amendments, the section pertaining to soil erosion and sedimentation control has been made more specific and detail oriented.	Upon adoption of amendments to the Rules and Regulations, Town staff will incorporate similar language into the Erosion Control By-Law.

<p>4B</p> <p>Revised</p>	<p>Establish a Procedure for the Receipt of Information Submitted by the Public</p>	<p>Planning Board and Department of Public Works/ Engineering Dept.</p>	<p>Record number of phone calls, copies of articles.</p>	<p>The Conservation Commission presently responds to all inquiries or site inspections within their jurisdiction. The Town's Construction Inspector and the Planning Division monitor sites that lie outside of their jurisdiction. Upon receipt of site specific complaints by residents, a determination is made as to which regulatory department could best respond. The Town is looking into hiring additional staff to oversee inquiries, complaints and enforcement of sites that would fall outside of the Conservation Commission's jurisdiction.</p> <ul style="list-style-type: none"> • Look into hiring staff to address public inquiries and comments. • Advise who to call to report erosion or runoff concerns at construction sites in town. • Develop a protocol for addressing inquiries or complaints. • Keep records of complaints and actions taken.
<p>4C</p> <p>Revised</p>	<p>Develop Guidance for Erosion Controls & Conduct Inspections</p>	<p>Planning Board, Department of Public Works/ Engineering Dept., Conservation Commission, and Consultant</p>	<p>Inspection checklist and documented inspections.</p>	<ul style="list-style-type: none"> • Develop an inspection checklist. • Develop guidance outlining specific erosion control requirements desired by Andover. • Set up a tracking program. • Conduct inspections of erosion controls at all sites • Adopt more specific erosion control regulations <p>• Areas under Conservation's jurisdiction are required to have an erosion control plan that meets the State's stormwater standards and that is recorded at the registry of deeds. Periodic inspections of erosion controls are conducted by outside independent engineers under a Town program. Applicants that fail to follow approved plans are issued warnings and if necessary fines.</p> <ul style="list-style-type: none"> • Regulations are in the process of being revised/adopted to include more site specific detail oriented requirements pertaining to erosion control at all construction sites.

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 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5A Revised	Develop BMP Bylaws	Planning Board	Bylaw at Town meeting by year 3.	Amendments to Subdivision Rules & Regulations to comply with Phase II are 95% complete. Proposed amendments anticipated to be adopted by June 2005.	Adopt amendments to Subdivision Rules and Regulations.
5B Revised	Develop and Implement Inspection Program	Planning Board, Department of Public Works/ Engineering Dept., Conservation Commission, Selectmen and Consultant	Copies of maintenance reports received annually, plus records of inspections completed and results.	<ul style="list-style-type: none"> Program has been delayed until proposed amendments to Subdivision Rules and Regulations are adopted and until additional staff requests are granted. Outside independent engineers periodically inspected construction projects within areas under the Conservation's jurisdiction. A Certificate of Compliance is provided when construction sites are stabilized. 	<ul style="list-style-type: none"> Identify specific O&M requirements desired by Andover and reference in the new bylaw. Identify the department(s) who will perform inspections. Require operation and maintenance plan of developers. Set up permit program and maintenance tracking program that requires annual submittal of maintenance report by owner.
5C Revised	Develop BMP Design Standards	Planning Board, Department of Public Works/ Engineering Dept., Conservation Commission, and Consultant	Copy of draft bylaws.	<ul style="list-style-type: none"> Design standards have been worked into regulatory amendments and are currently being updated by Consultant. The Town is evaluating how best to include these design standards. BMPs for runoff and sedimentation control are required in areas under the Conservation's jurisdiction. The Commission began working on establishing a comprehensive sediment control guide. 	Incorporate design standards into bylaw/regulations by reference.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6A Revised	Sweep Streets in Town	Department of Public Works/Highway Division	Priority plan of sweeping based on water quality impact.	All streets are swept in Town at least annually. The downtown area was swept twice per week except during the winter.	Continue street sweeping program.
6B Revised	Clean Catch Basins	Department of Public Works/Highway Division and Consultant	Records of cleaning, inspections and maintenance.	Approximately 1400 catch basins were cleaned. Problem areas were cleaned more often.	Continue to clean all catch basins in Town at least once every two years. Modify cleaning frequency as needed once inspection and maintenance plan is completed.
6C Revised	Develop and Implement an Inspection and Maintenance Plan	Department of Public Works/Highway Division	Written policy. Records of inspections and maintenance.	No written policy was completed in Permit Year 2; however, the Engineering Staff continues to report maintenance problems to the Highway Department found during the outfall inspection program.	<ul style="list-style-type: none"> • Develop a written inspection/maintenance schedule for structural BMPs throughout Town. • Perform inspection and maintenance, modifying frequency as necessary • Develop an in-house policy for disposing of maintenance generated wastes.
6D Revised	Berm Sand/Salt Pile and Evaluate Options for Protection	Department of Public Works/Highway Division	Records of modifications, including photographs.	Shed was constructed in permit year 1 to store sand/salt pile from runoff. No further action is needed.	No further action is required.

6E Revised	Store Paving Tools and Equipment Indoors	Department of Public Works/Highway Division	Designated indoor storage area. Record of Memo.	All paving tools and equipment are stored indoors in designated areas.	Continue to store all paving tools and equipment indoors.
6F Revised	Rinse Marking Paint Buckets to the Sanitary Sewer System and Store Buckets Indoors	Department of Public Works/Highway Division	Designated indoor storage area. Record of Memo.	All marking paint buckets are rinsed to the sanitary sewer system and stored indoors.	Continue to rinse all marking paint buckets to the sanitary sewer system and store indoors.
6G Revised	Implement BMPs to Reduce Sediments Entering the Drainage System	Department of Public Works/Highway Division	Records of sweeping and inspection records.	<ul style="list-style-type: none"> The paved roadway and catch basins at the DPW Yard were frequently swept/cleaned. Re-established drainage swale and constructed a sediment basin sump at 303 Lowell Street. 	Continue to sweep the paved roadway and clean the catch basins at the DPW Yard on a frequent basis.
6H Revised	Bring Floor Drain System at the Water/Sewer Building into Compliance	Department of Public Works/Engineering Dept.	As-built sketches.	Floor drain has been brought into compliance in permit year 1.	No further action is required.
6I Revised	Bring Floor Drain System at the Vehicle Maintenance Building into Compliance	Department of Public Works/Engineering Dept.	As-built sketches.	Floor drain has been brought into compliance in permit year 1.	No further action is required.
6J Revised	Wash Vehicles in Accordance with DEP Regulations	Department of Public Works/Highway Division	Record of Memo.	Vehicles are washed indoors to floor drains that discharges into an oil/water separator and the sanitary sewer system.	Continue washing vehicles indoors.

