

Municipality/Organization: Town of Boxborough

EPA NPDES Permit Number: MA941183/MaDEP

MaDEP Transmittal Number: W-03602

Annual Report Number

& Reporting Period: No. 3: May 05 – May 06

Received
8-17-06

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NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Elizabeth Hughes

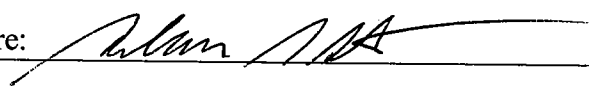
Title: Town Planner

Telephone #: 978/263-1116 x 112

Email: elizabeth.hughes@town.boxborough.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: Selina Shaw

Title: Acting Town Administrator

Date: August 15, 2006

Part II. Self-Assessment

The Town of Boxborough 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 3	Planned Activities – Permit Year 4 (**Reliance on non-municipal partners indicated)
1.1	Educate the community by informing them that any dumping into town storm drains is illegal.	CC, BoH	Prepare brochure for distribution in 2007. Post information on CC & BoH web page.	In progress.	Finalize brochure for distribution to residents and business owners in 2007. Put information on the town website.
1.2	Distribute information regarding the following items: <ul style="list-style-type: none"> ▪ function and proper maintenance of private wells and septic systems with any well and septic permit. ▪ the use of detergents, fertilizers, and other potentially harmful practices. ▪ the use of environmentally friendly products. 	CC, BoH	Prepare brochure for distribution in 2007. Post information on CC & BoH web page.	In progress.	Finalize brochure for distribution to residents and business owners in 2007. Put information on town website. Distribute EPA's "The Solution to Stormwater Pollution" brochure at annual Town Meeting on May 8, 2006

1.3	Distribute information explaining the hazards of dumping hazardous materials and the importance of participating in Hazardous Waste collections.	BoS, BoH, DPW	Prepare brochure and distribute at the town transfer station.	Brochure distributed at least two weeks prior to the collection date – publicize date in the local newspaper, on town website and via BoS email list.	Distribute information similar to last year. Hazardous Waste Collection day to be held in April or May 2006
1.4	Develop Stormwater Management Plan	PB	Prepare Stormwater Management Plan.	Hazardous Waste Collection day held May 13, 2006 Draft copy of Plan reviewed by all Town Boards/Committees/Staff.	Make necessary revisions to the Stormwater Management Plan

1a. Additions

1.5	Develop pet waste program for municipal & conservation land	BoS, CC, DPW, TP	Develop informational pamphlet Provide proper waste disposal items at municipal and conservation land	Funds being appropriated and items to be ordered	Prepare informational pamphlet.
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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
2.1	Water Resources Committee	BoS, CC, PB, BoH	Put water quality monitoring under the WRC's charge.	Water Resources Committee formed and Committee has been monitoring water quality reports and assessing pollution issues	Committee will continue to monitor reports and follow-up on any pollution issues
2.2	Implement a stewardship program for conservation lands.	BoS, CC	Develop a volunteer stewardship program	Land Stewardship Committee formed in 2004	LansCom currently evaluating drainage issues on existing trails and will be recommending improvements to the CC for implementation in summer/fall 2006

2.3	Evaluate the Use Schedule of the Zoning Bylaw to further regulate uses that may impact groundwater quality.	PB	Prepare Article for changing Use Schedule so that Automobile fuel/ service stations and repair garages are allowed by special permit instead of by right.	An Article for changing the use schedule will be included in the ATM 2007 Warrant.	Review the Zoning Bylaws for other Uses that may be further regulated.
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2a. Additions

2.4	Public hearings on Draft Stormwater Management Plan	PB, BoS	Hold public hearings in 2006/2007		Hold public hearing, incorporate changes and have Plan accepted by PB & BoS
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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
3.1	Map the location of all catch basins, manholes, pipes, outfall pipes, and the names of all waters that receive discharges from those outfalls on GIS.	DPW	Number of drainage facilities mapped.	All catchbasins have been mapped on GIS. Continue to map drainage manholes, pipes, and outlet pipes. (GPS of structures done by WPI students)	Finalize GPS of drainage structures in 2007
3.2	Dry Weather Screening and mapping of Outfalls.	DPW, BoH	Perform inspections.	Scheduled for years 4 through 5.	
3.3	Develop a System for removal, clean-up, and mitigation of Illicit Discharges once detected.	PB, BoH	Number of illegal discharges that have been detected.	Scheduled for year 5.	

3.4	Stencil all storm drains with "NO DUMPING" – Drains to the Environment" stencils.	DPW	Stencil basins	Develop stencil	Scheduled for summer/fall of 2006
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3a. Additions

3.5	Draft illicit connection bylaw	BoS, BoH, DPW	Warrant article on 2007 Annual Town meeting		Complete draft bylaw in winter 2006 for internal review
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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
4.1	Review existing regulations for adequate construction site erosion and post-construction stormwater management.	CC, PB, BoH	Amendments to existing regulations and develop standard conditions of approval.	Regulations have been put into place requiring the submission of erosion control plans and standard conditions of approval. ECP form adopted requiring inspections by Town's consulting engineer at specific times during construction	Review and propose changes to the Subdivision Rules and Regulations and develop standard conditions. Review Site Plan regulations and propose changes to 2007 Annual Town Meeting.
4.2	Building Inspector to aggressively enforce regulations and bylaws pertaining to construction run-off.	BoS, BL, TP	Number of enforcement orders issued.	No enforcements issued	Continued enforcement of site construction erosion control measures.

4a. Additions

4.3	Erosion Control Plan	PB, TP	Submission of Erosion Control Plan for subdivisions and commercial developments	Regulations have been put into place requiring the submission of erosion control plans and standard conditions of approval. ECP form adopted requiring inspections by Town's consulting engineer at specific times during construction	Continue implementation of regulation and conditions and inspections.
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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
5.1	Review existing regulations for adequate construction site erosion and post-construction stormwater management.	CC, PB, BoH	Amendments to existing regulations and develop standard conditions of approval.	Erosion Control Plan form adopted requiring inspections by Town's consulting engineer at specific times during construction	Review and propose changes to the Subdivision Rules and Regulations and develop standard conditions. Review Site Plan regulations and propose changes to 2007 Annual Town Meeting.

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
6.1	Minimize the use of road salt.	DPW	Miles of public road where a reduced salt mix has been used.	DPW used a reduced salt mix ratio: (25%NaCL to 75% Sand) for FY06	Continue to use a reduced salt mixture for winter of 2006-2007.
6.2	Sweep all streets and town parking lots annually by June 1 st .	DPW	Miles of streets swept.	Spring street sweeping completed	Sweep all streets by June 1, 2007
6.3	Clean all town catch basins annually.	DPW	Number of catch basins cleaned	Spring catch basin cleaning complete: 445 structures cleaned in FY06.	Clean all town catch basins by June 30, 2007
6.4	Test Water Quality in municipal buildings once every two years.	BoH	Number of tests performed.	Town Hall testing scheduled in 2006. Blanchard Memorial School/Fire/Police water tested on a regular basis as a Community Water Supply.	Continue testing every 2 years
6.5	Municipal employee training.	BoS, DPW	Establish procedures to train municipal employees on using BMPs for all municipal operations	No action to date	Draft employee training manual

6.6	Monitor 21E sites and their clean up.	BoH	Number of sites monitored.	Continue to monitor all open 21E Sites.	Same as Year 3
6.7	Track failed septic systems on GIS	BoH,TP	Number of failed systems mapped.	No failed systems mapped to date.	Continue failed septic system failure mapping on GIS.
6.8	Continue groundwater monitoring program along with Site Plan Approval and continue to monitor groundwater quality reports prepared by the Littleton Water Department. Track results on GIS.	BoH, PB, TP	Require groundwater monitoring for all commercial operations requiring Site Plan Approval from the Planning Board.	Commercial Site Plans groundwater monitoring was conducted by Littleton Water Department. No commercial site plans issued in Permit Year 3	Continue commercial groundwater monitoring. Put Groundwater Monitoring information on GIS.

(BoS: Board of Selectmen; PB: Planning Board; TP: Town Planner; BI: Building Inspector; BoH: Board of Health; CC: Conservation Commission; DPW: Public Works Director)

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

See attached water quality information collected in Permit Year 3.



LAKESIDE OFFICE PARK
607 NORTH AVENUE, SUITE 11
WAKEFIELD, MA 01880
781-246-8897
FAX: 781-246-8950
WWW.ECSCONSULT.COM

April 10, 2006
ECS Project No. 05-205421.00

Elizabeth Davis
Meredith & Grew
160 Federal Street
Boston, MA 02110-1707

RE: Final Results of Quarterly Groundwater Sampling,
1300 Massachusetts Avenue
Boxborough, Massachusetts

Dear Ms. Davis:

Per the March 14, 2006 Scope of Work, Environmental Compliance Services Inc. (ECS) has performed a quarterly groundwater sampling event on March 22, 2006 for Meredith & Grew at the above-referenced location. All data have been summarized on the attached tables.

No volatile organic compounds (VOCs) were detected in any of the groundwater samples. All metal and general chemistry results were below any federal or state drinking water standards, with two exceptions. pH results were below the USEPA National Secondary Drinking Water Standard range, indicating slightly acidic groundwater, and one total manganese result, from monitoring well NC13-2, was reported at a concentration of 0.297 milligrams per liter (mg/L), above the USEPA National Secondary Drinking Water Standard of 0.05 mg/L. Concentrations of total manganese from the three remaining monitoring wells (two of which appear downgradient of the septic system) are below the 0.05 mg/l standard. The exceedance of total manganese in monitoring well NC13-2 is possibly naturally occurring and/or associated with road use, as this well is located adjacent to the roadway and in an upgradient position to the septic system. Based on the remaining data, there appear to be no operational issues with the on-site leach field at this time.

If you have any questions regarding the attached data, please do not hesitate to contact our office at (781) 246-8897.

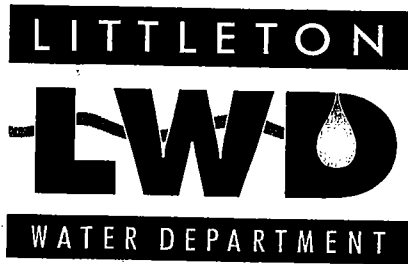
Sincerely,

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

A handwritten signature in black ink, appearing to read 'James B. Matz', is written over the typed name.

James B. Matz, PG, LSP
Project Manager

cc: Boxborough Board of Health
Boxborough Planning Board
Nashoba Associated Boards of Health



39 Ayer Road, P. O. Box 2406
Littleton, MA 01460-3406
Telephone (978) 486-3104
Fax (978) 486-8549
www.lclwd.com

Savas C. Danos, General Manager

June 20, 2006

Mr. Seth Campbell
Meredith Grew, Inc.
160 Federal Street
Boston, MA 02110

Re: Groundwater Monitoring Program, 330 Codman Hill Road

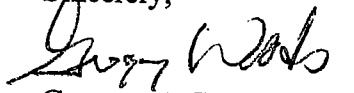
Dear Mr. Campbell:

In compliance with the Town of Boxborough's Zoning Bylaws and the groundwater monitoring program established for this facility, the Littleton Water Department sampled the monitoring well network at 330 Codman Hill Road on May 22, 2006. Monitoring wells CHRT-1, CHRT-2, CHRT-3 and CHRT-4 were sampled and analyzed for volatile organic compounds (VOCs) via EPA method 524.2, Safe Drinking Water Act heavy metals and general water quality parameters. A copy of the laboratory report is provided in Appendix A

Nitrate levels were again very low across the site and no VOCs were identified in any of the wells. Sodium levels were elevated in wells CHRT-3 and CHRT-4 and most likely due to nearby road salting activities.

The groundwater-sampling program for this facility remains on an annual schedule. The next sampling event will be conducted in the Spring of 2007 and will include VOCs and general water quality parameters. Thank you for your continued cooperation with this important program; please call me at (978) 486-3104 with any questions or concerns.

Sincerely,


Gregory A. Woods, PG.
Environmental Analyst

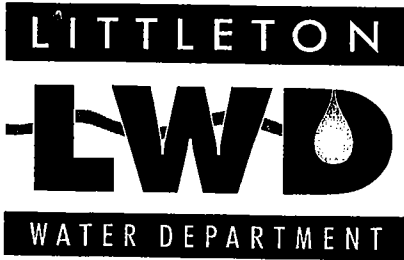
Enclosures

cc: Boxborough Board of Health
Boxborough Planning Board ✓
Nashoba Associated Boards of Health

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Savas C. Danos, General Manager

June 20, 2006

Mr. Jim Knights
New Boston Management Services
60 State Street, Suite 1500
Boston, MA 02109

Re: Groundwater Monitoring Program
Boxborough Citimart 155 Nominee Trust
Boxborough Citimart 159 Nominee Trust

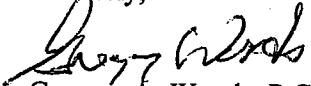
Dear Mr. Knights:

In compliance with the Town of Boxborough's Zoning Bylaws and the Special Permit granted to the Boxborough Technical Park (decision #84-18), the Littleton Water Department sampled a subset of the groundwater monitoring network on this property on May 25, 2006. Monitoring wells BTP-1, BTP-4 and BTP-6 were sampled and analyzed for volatile organic compounds (VOCs) via EPA method 524.2, Safe Water Drinking Act heavy metals and general water quality parameters. A copy of the laboratory reports are provided in Appendix A.

Elevated sodium was detected in wells BTP-1 and BTP-4 and most likely attributed to nearby road salting activities. No VOCs were identified in any wells and all other water quality parameters measured remain at acceptable levels.

The next sampling event at this site will take place in the Spring of 2007 and will include general water quality parameters and VOCs. Please call me at (978) 486-3104 with any questions or concerns about the groundwater monitoring plan and we thank you for your continued cooperation.

Sincerely,


Gregory A. Woods, P.G.
Environmental Analyst

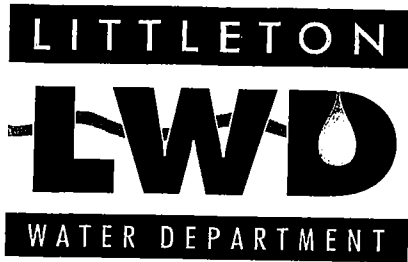
Enclosures

cc: Boxborough Board of Health
Boxborough Planning Board ✓
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Savas C. Danos, General Manager

June 20, 2006

Mr. Nino Micozzi
Micozzi Management Inc.
159 Cambridge Street
Allston, Massachusetts 02134

Re: Groundwater Monitoring Program, Boxborough Commons

Dear Mr. Micozzi:

In compliance with the Town of Boxborough's Zoning Bylaws the Littleton Water Department sampled the monitoring well network at Boxborough Commons on May 24, 2006. Monitoring wells BC-3 and BC-4 were sampled and analyzed for volatile organic compounds (VOCs) via EPA method 524.2, Safe Drinking Water Act heavy metals and general water quality parameters. Copies of the laboratory reports are provided in Appendix A

A low concentration of toluene was detected in groundwater from well BC-3, most likely attributable to infiltration of petroleum products from parking lot run off. No VOCs were detected in the sample from BC-4 and all other parameters tested remain at acceptable levels.

The next round of sampling at this facility will take place in the Spring of 2007 and will consist of VOCs and general water quality parameters. We appreciate your cooperation with this important program. Please call me at (978) 486-3104 with any questions or comments.

Sincerely,

A handwritten signature in black ink that reads "Gregory Woods".

Gregory A. Woods, P.G.
Environmental Analyst

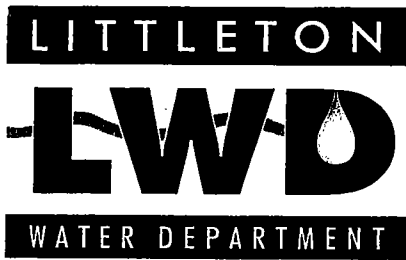
Enclosures

cc: Boxborough Board of Health
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Savas C. Danos, General Manager

June 20, 2006

Mr. Charles Nasser
National Technical Systems
1146 Massachusetts Avenue
Boxboro, MA 01719

Re: Groundwater Monitoring Program

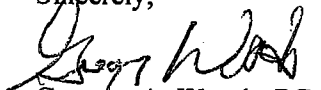
Dear Mr. Nasser:

In compliance with the Town of Boxborough's Zoning Bylaws and the occupancy permit issued to this facility, the Littleton Water Department sampled the monitoring well network surrounding National Technical Systems (NTS) on May 22, 2006. Four monitoring wells (NTS-1 through NTS-4) were sampled and analyzed for volatile organic compounds (VOCs) via EPA method 524.2, Safe Drinking Water Act heavy metals and general water quality parameters. The cooling tower was not discharging effluent and was not sampled. A copy of the laboratory reports are provided in Appendix A.

The gasoline additive methyl-tert-butyl ether (MTBE) was detected in monitoring well NTS-1 and NTS-3 at concentrations of 2.3 micrograms per liter (ug/L) and 0.64 ug/L, respectively. This detection is most likely attributable to roadway and/or parking lot runoff. No other VOC's were detected in the on-site monitoring wells. Groundwater samples from monitoring well NTS-2 exhibited elevated concentrations of sodium and chloride, which is likely the result of road salt on the driveway and along Massachusetts Avenue. Nitrate and nitrite concentrations in NTS-2 exceeded their respective standards by several orders of magnitude. Nitrate was detected at a concentration of 55.3 ug/L (standard of 10 ug/L) and the nitrite was detected at a concentration (standard of 1 ug/L). These excessive concentrations are likely the result of the new septic system leach field that was installed in close proximity to well NTS-2. All other groundwater quality parameters measured remain at acceptable levels.

The next sampling event at this site will take place in the spring of 2006 and will include general water quality parameters and VOCs. Please call me at (978) 486-3104 with any questions or concerns and again, we thank you for your continued cooperation.

Sincerely,


Gregory A. Woods, PG.
Environmental Analyst

Enclosures

cc: Boxborough Board of Health
Boxborough Planning Board ✓
Nashoba Associated Boards of Health

