

Town of Redding

2006 Stormwater Annual Report

Permit Number GSM 000085

Introduction

The Town of Redding is submitting this annual report as required by the Connecticut Department of Environmental Protection's (CT DEP) "General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (Permit)". This Annual Report (Report) will describe the Minimum Control Measures and the Best Management Practices existing and proposed that are being conducted to serve the stormwater registration.

The Report will be available to the public for review and comment for thirty days as required in the review period of Section 6(i) in the Permit guidelines. A copy of the legal notice is attached in Appendix A. Also, the municipal plan review fee of \$187.50 is enclosed as required.

Permit Compliance Status

The Town is completing many Best Management Practices to achieve permit compliance. This annual report tabulates data from the past year to discuss the status of the existing and proposed minimum control measures. In the annual report for 2007 the Town will combine and merge data to continue to develop comprehensive annual reports. In the preparations of the development and implementation of the Permit registration the Town has hired two additional part-time employees to further achieve the Best Management Practices (BMP) of the Minimum Control Measures. The draft stormwater management plan has been completed. This Report will discuss the existing and proposed BMP's and their respective status below.

Stormwater Monitoring and Parameter Results

The Town has contracted with Aqua Environmental Labs to collect and analyze the six selected stormwater outfalls. The stormwater samples were collected following the sampling protocols listed in Section 6(h) of the Permit. The stormwater sample locations include two samples from commercial\industrial areas and four samples from residential areas. The stormwater samples are submitted on the SMR forms and are attached in Appendix B along with lab data sheets.

Schedule of Minimum Control Measures

The Town conducts daily activities that include several existing BMP's and the development of proposed and future BMP's for implementation. The minimum control measures and the current schedule for each are listed below. In addition, the current status of the specific BMP is also included. There will be one appendix for the six minimum control measures that will include hard copies of supporting documentation for reference.

1. Public Education and Outreach

BMP ID	Public Education – BMP Action	Responsible Department	Status
1-1	Development of a Stormwater Informational webpage	Zoning	Completed August 2006
1-2	Stormwater informational packets to be mass mailed	Zoning	Continues to be sent as packets become available
1-3	Develop an Illegal/Illicit connection fact sheet	Highway	Fact sheet(s) available to public Year 4
1-4	Use of 3 rd party stormwater factsheets & informational packets	First Selectman	Review of information is on-going
1-5	Interaction with watershed associations	First Selectman	Recently joined another watershed association
1-6	Attendance at various informational stormwater meeting and seminars	Zoning	Department(s) attend specific seminars when available

The Zoning Department completed the stormwater informational webpage in August of this year. Currently the webpage is added to as information becomes available. The use of the webpage will allow employees, residents and local business owners a central location to review and reference stormwater management documents to further educate the public as required in part of this minimum control measure (MCM). The use of tax bills to mass mail certain stormwater documents allows additional brochures to get to the residents and tax payers. This is an inexpensive means to get helpful documents out to the residents and taxpayers of Redding. In the June 2006 tax bill the Town included a stormwater brochure entitled "How to Manage and Landscape Your Property". This brochure listed many helpful tips to maintain and landscape an "environmental friendly" property. Also, the Town is reviewing third party stormwater documents for potential use and addition to the webpage. The membership in the watershed associations allows the Town to further expand its knowledge base to manage the requirements of this MCM. The Town has attended or plans to attend informal meetings and stormwater seminars. The Wetlands Officer recently attended the "The Norwalk River: Impaired or Imperiled?" meeting on 10/16/06. Attached in Appendix C are copies of the fact sheets used and meetings and seminars attended during this permit year.

2. Public Involvement/Participation

BMP ID	Public Participation – BMP Action	Responsible Department	Status
2-1	Develop Public Involvement & Participation Program	Zoning	The town maintains a current policy.
2-2	Follow FOI Requirements	First Selectman	The Town follows the State Statute.

2-3	Hazardous Waste Collection Day (Multi Town)	Health	Completed Bi-annually, scheduled Newtown and Danbury.
2-4	Collection of waste motor oil and used oil filters	Transfer Station	The program is a year round policy.
2-5	General town-wide road side clean-up	Highway	The program is a year round policy. Pick-ups are scheduled April through October.
2-6	Norwalk River clean-up	First Selectman	Completed Annually, Conducted 4/22/06.
2-7	Develop and Implement a Saugatuck River clean-up program	First Selectman	The program will be drafted Year 4 and implemented Year 5

The Town maintains public involvement programs throughout the stormwater system. The collection of used motor oil and filter program allows residents of the Town to drop off these potential pollutants for proper disposal. The Norwalk River clean-up is a group of volunteers that conduct a clean-up of the river banks of trash and debris. The Norwalk River Watershed Association and the Town work together to schedule and conduct a river clean-up. The clean-up was completed along the Norwalk River clean-up on April 22, 2006. The Town will be working with the Saugatuck River Watershed Partnership to develop a similar clean-up program for the portion of the river and watershed located within the Town. This program is proposed to be developed during year 4 of the Permit and is scheduled for implementation for year 5.

3. Illicit Discharge Detection and Elimination

BMP ID	Illicit Discharge Detection & Elimination – BMP Action	Responsible Department	Status
3-1	Map Outfalls Greater than 15" in UA's	Zoning	The current base mapping of the town is complete. See below for schedule of stormwater structure mapping.
3-2	Map Outfalls Greater than 15" entire town	Zoning	The current base mapping of the town is complete. See below for schedule of stormwater structure mapping.
3-3	Map Outfalls Greater than 12" in UA's	Zoning	The current base mapping of the town is complete. See below

			for schedule of stormwater structure mapping.
3-4	Program to Detect & Eliminate Illicit Discharges	Health	Currently the Health Department handles illicit discharges complaints
3-5	Develop Illicit Discharge Ordinance	Health	Development of the ordinance is scheduled for year 4.
3-6	Development of a Town wide GIS, pending funding	Assessor	The base map of the town is complete; further development is scheduled, pending funding approval.
3-7	Review of septic system design and installation.	Health	Currently the Health Department reviews all septic designs to verify compliance
3-8	Aquarion review and inspect watershed areas for potential septic failure.	Health	Aquarion completes tri-annual inspections of the watershed.

The Town has completed the initial base map of the town for preparation of a town-wide geographic information system (GIS). The further funding of the GIS will be discussed and the mapping of the stormwater structures is scheduled for the next permit period. The Town does not anticipate being able to secure necessary funding to complete the stormwater structure mapping for the current permit period. The schedule of the stormwater mapping will be reviewed and amended, if possible, should the funding and work associated be able to be completed during this permit period. Currently, the Health Department handles complaints of illicit discharges and reviews the complaint to locate any potential illegal discharge. If an illicit discharge is found the owner is notified for proper disconnection. Aquarion Water Company completes site inspections of the Saugatuck, Aspetuck and Little River watershed areas located within the Town. These inspections are completed in a three year rotation to verify that there are not any potential illicit discharges migrating to the watersheds and waterways. These inspection reports are submitted to the Health Department and are reviewed. The Town does not allow any non-stormwater connections to discharge to the stormwater system. The Highway Department permits and reviews all connections to the stormwater system. The development of an illicit discharge ordinance is scheduled for draft and completion in year 5. The Health Department reviews all septic system design and installation to maintain public health code compliance. Any septic installation within 100 feet of a wetland or 150 feet of a watercourse is required to obtain approval from the Redding Conservation Commission. The Health Department requires certain food service facilities to have a properly installed and functional grease trap. These grease traps are

inspected by the Health Department annually for proper maintenance, functionality and cleaning.

4. Construction Site Stormwater Runoff Control

BMP ID	Construction Site Runoff Control – BMP Action	Responsible Department	Status
4-1	Review Land Use Regulations	Zoning	Review of guidelines completed and deficiencies have been addressed.
4-2	E&S plan submission for review by the Zoning Commission	Zoning	Included in Zoning Regulations
4-3	Installation of proper E&S controls	Zoning	Included in Zoning Regulations
4-4	Use of the State of Connecticut Guidelines for Soil Erosion & Sedimentation Control	Zoning	The Town uses guidelines as technical reference.
4-5	Inspection Procedures for E&S Controls	Zoning	Included in Zoning Regulations
4-6	Reference to the Dewatering General Permit to all required applicants	Zoning	Reference to the GP is made on appropriate applications
4-7	Site Trash Management policy is included in the Zoning Regulations	Zoning	Included in Zoning Regulations

The Town requires development applicants to submit plans for review by the Zoning Commission prior to obtaining a permit. Also, all erosion & sedimentation controls are to be installed by the developer and inspected by the Zoning Department prior to the commencement of construction activities. In the Zoning Regulations there is a requirement that all sites remain “orderly” being free of general trash and construction debris for the duration of the project. During this permit year, year 3, the Town will begin referencing all applicants that they will be required to review the criteria in the Construction Site Dewatering General Permit to submit if necessary. The Town uses and follows the State of Connecticut Guidelines for Soil Erosion and Sedimentation Controls in conjunction with its Zoning Regulations for development, installation and inspection of proper operation of erosion and control measures. The Zoning Department maintains records of inspections conducted on site and the status of soil erosion and sedimentation controls. A copy of the inspection record is included in Appendix E.

5. Post-construction Stormwater Management in New Development and Redevelopment

BMP ID	Post Construction Runoff Control – BMP Action	Responsible Department	Status
5-1	Review Land Use Regulations	Zoning	BMP's are proposed to address deficiencies See 5-2 thru 5-5
5-2	Develop Post Construction Ordinance	Zoning	Currently Site Plan Resolutions require certain sites to prepare post-construction stormwater monitoring plans; a formal Ordinance will be drafted and approved by the end of year 5.
5-3	Develop and Implement Post Construction BMP Strategy	Zoning	Current plan review requires developer to complete; Ordinance will require all sites to comply.
5-4	Develop Program to Ensure long-term O&M of BMP's	Zoning	The program will be developed by the end of year 5.
5-5	Require the development plan to certify the site complies with Phase II goals	Zoning	Submission of plans that will provide research of Phase II, included in Ordinance.

The Town requires construction sites meet post construction erosion control measures to avoid pollutants and sediment to migrate to the stormwater system. During the inspection process the post-construction E&S measures are inspected to verify proper working order prior to obtaining a certificate to operate and/or occupy. The development of the post-construction ordinance will be drafted and implemented during year 5 of the permit. This ordinance is scheduled to require all sites to be certified by the applicant that the site meets the goals associated with this Permit. The ordinance may also require sites to have an association/owner have an operating bond established to finance the maintenance and operation of the new stormwater structures. The Town currently maintains the stormwater system and has programs established to further improve the working conditions of the stormwater structures. These programs street sweeping and stormwater structure maintenance, repair and replacement are discussed in MCM #6.

6. Pollution prevention/good housekeeping for municipal operations

BMP ID	Good Housekeeping – BMP Action	Responsible Department	Status
6-1	Develop Training Program	Highway	Use training from Phase I GP as outline for new program
6-2	Sweep Streets Once a Year	Highway	Completed annually each Spring
6-3	Evaluate Streets to be Swept Twice a Year in UA	Highway	The secondary road sweep list changes due to need or lack of sweeping necessity.
6-4	Clean Stormwater Structures Once a Year	Highway	Completed annually in the spring
6-5	Develop a System to Repair and/or Replace MS4 Structures	Highway	The repairs are completed as necessary and additions are completed to coincide with the road-resurfacing program.
6-6	Develop and Implement O&M Plan	Highway	A O&M plan will be drafted and implemented by year 5

The Highway Department handles the maintenance of the stormwater system. The streets are scheduled to be swept twice during the year. Initially the roads are swept in the spring and if the weather permits again in early winter. If an area(s) is required to have an additional sweeping the affected road(s) are swept. The second round of sweeping in early winter is completed only if the weather permits and is conducted to avoid deposits of sand\ salt mixtures from collecting on the roads and migrating to the stormwater system. The catchbasin repairs and replacements are also completed by the Highway Department. Annually the stormwater structure repair\replacements are completed as necessary as a part of the road resurfacing program to further enhance the working conditions of the stormwater system. The development of an employee training protocol will be drafted in early 2007 and will follow similar procedures listed in the Phase I General Permit. In 2006-2007 The Highway Department is testing a new product, "Magic Salt", which reduces the need for sand and salt. The "Magic Salt" product is approved by the New York Department of Transportation for use in watershed areas. The stormwater operation and maintenance is scheduled to be drafted and implemented in year 5.

APPENDIX A
2006 Legal Notice

CERTIFICATE OF PUBLICATION

State of Connecticut
County of Fairfield

ss Ridgefield

I, Thomas B. Nash, being duly cautioned and sworn depose and say that I am the Publisher of Hersam Acorn, LLC. and that there was printed in The Redding Pilot, a weekly paper published in the Town of Ridgefield, CT on November 22, 2006 a copy of the attached order of notice.

Thomas B. Nash

Subscribed and sworn to this 24th day of November 2006 before me.

Linda Zarczynski

Notary Public

Linda Zarczynski

My Commission Exp. Oct-31, 2008

Pursuant to section 4 (d) (1) of the State of Connecticut, Department of Environmental Protection's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, the Town of Redding's draft copy of its 2006 Annual Report is available for public review and comment for thirty (30) days in the First Selectman's Office located at 100 Hill Road, Redding, Connecticut and in the Zoning Office during normal business hours.

11-22

APPENDIX B
Stormwater Monitoring Report Forms



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: TOWN OF REDDING

Mailing Address: PO BOX 1028, REDDING, CT 06875

Contact Person: TOM GORMLEY Title: ZEO Phone: (203) 938-8517

Permit Registration #GSM 000085

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
ADJACENT TO 1 BEEHOLM ROAD

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): GILBERT & BENNETT BROOK, 7300

Time of Start of Discharge: 10/17/06, 12:45 PM

Date/Time Collected: 10/17/06, 2:20 PM Water Temperature: 22

Person Collecting Sample: THOMAS J. BRAUN

Storm Magnitude (inches): 0.20 Storm Duration (hours): 6 HOURS

Date of Previous Storm Event: 10/12/06

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	6.6	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	49 mg/L	Aqua Environmental Lab
Conductivity	120.1	139 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	2.8 mg/L	Phoenix Environmental Lab
COD	410.4	80 mg/L	Aqua Environmental Lab
Turbidity	180.1	106 NTU	Aqua Environmental Lab
TSS	160.2	423.2 mg/L	Aqua Environmental Lab
TP	365.2t	0.33 mg/L	Aqua Environmental Lab
Ammonia	350.2	<0.28 mg/L	Aqua Environmental Lab
TKN	351.3	1.96 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	0.85 mg/L	Aqua Environmental Lab
E. coli	SM922D	905 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: TOM GORMLEY, ZONING ENFORCEMENT OFFICER

Signature: _____ Date: 10.22.06



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875

Sample Date: 10/17/2006 2:20 PM
 Receipt Date: 10/17/2006 5:10 PM
 Report Date: 11/6/2006
 Sample Site: Stormwater

Sample ID#: 71941
 Sample Type: Test
 Sample Source: Bee Holm
 Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	905 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	49	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	<0.28	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	0.85	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.33	mg/L	No Limit Set	365.2t	None	10/25/2006
Total Kjeldahl Nitrogen as N	1.96	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	2.8	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	80	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	139	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	6.6	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	423.2	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	106 *	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by

CT Lic PH-0787

NY Lic 11706



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>TOWN OF REDDING</u>
Mailing Address: <u>PO BOX 1028, REDDING, CT 06875</u>
Contact Person: <u>TOM GORMLEY</u> Title: <u>ZEO</u> Phone: <u>(203) 938-8517</u>
Permit Registration # <u>GSM 000085</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>ADJACENT TO 6 MAIN STREET</u>
Please circle the appropriate area description: Industrial, <u>Commercial</u> or Residential
Receiving Water (name, basin): <u>GILBERT & BENNETT BROOK, 7300</u>
Time of Start of Discharge: <u>10/17/06, 12:45 PM</u>
Date/Time Collected: <u>10/17/06, 2:30 PM</u> Water Temperature: <u>22</u>
Person Collecting Sample: <u>THOMAS J. BRAUN</u>
Storm Magnitude (inches): <u>0.20</u> Storm Duration (hours): <u>6 HOURS</u>
Date of Previous Storm Event: <u>10/12/06</u>

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	6.9	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	17 mg/L	Aqua Environmental Lab
Conductivity	120.1	112 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	4.4 mg/L	Phoenix Environmental Lab
COD	410.4	106 mg/L	Aqua Environmental Lab
Turbidity	180.1	22.8 NTU	Aqua Environmental Lab
TSS	160.2	26.4 mg/L	Aqua Environmental Lab
TP	365.2t	0.34 mg/L	Aqua Environmental Lab
Ammonia	350.2	<0.28 mg/L	Aqua Environmental Lab
TKN	351.3	1.68 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	<0.5 mg/L	Aqua Environmental Lab
E. coli	SM922D	1455 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.	
Authorized Official: <u>TOM GORMLEY, ZONING ENFORCEMENT OFFICER</u>	
Signature: 	Date: <u>12.22.06</u>



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

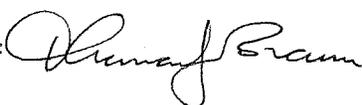
Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875
 Sample Date: 10/17/2006 2:50 PM
 Receipt Date: 10/17/2006 5:10 PM
 Report Date: 11/6/2006
 Sample Site: Stormwater

Sample ID#: 71943
 Sample Type: Test
 Sample Source: Post Office
 Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	249 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	29	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	0.56	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	<0.5	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.32	mg/L	No Limit Set	365.2t	None	10/25/2006
Total Kjeldahl Nitrogen as N	1.68	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	2.0	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	110	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	52	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	7.2	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	98.4	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	50.1 *	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by: 

CT Lic PH-0787

NY Lic 11706



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>TOWN OF REDDING</u>
Mailing Address: <u>PO BOX 1028, REDDING, CT 06875</u>
Contact Person: <u>TOM GORMLEY</u> Title: <u>ZEO</u> Phone: <u>(203) 938-8517</u>
Permit Registration # <u>GSM 000085</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____ <u>ADJACENT TO 1 JOHN TODD WAY</u>
Please circle the appropriate area description: Industrial, Commercial, or <u>Residential</u>
Receiving Water (name, basin): <u>SAUGATUCK RIVER, 7200</u>
Time of Start of Discharge: <u>10/17/06, 12:45 PM</u>
Date/Time Collected: <u>10/17/06, 3:00 PM</u> Water Temperature: <u>22</u>
Person Collecting Sample: <u>THOMAS J. BRAUN</u>
Storm Magnitude (inches): <u>0.20</u> Storm Duration (hours): <u>6 HOURS</u>
Date of Previous Storm Event: <u>10/12/06</u>

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	7.1	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	13 mg/L	Aqua Environmental Lab
Conductivity	120.1	31 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	<1.4 mg/L	Phoenix Environmental Lab
COD	410.4	58.5 mg/L	Aqua Environmental Lab
Turbidity	180.1	110 NTU	Aqua Environmental Lab
TSS	160.2	190.5 mg/L	Aqua Environmental Lab
TP	365.2t	0.39 mg/L	Aqua Environmental Lab
Ammonia	350.2	0.56 mg/L	Aqua Environmental Lab
TKN	351.3	1.12 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	<0.5 mg/L	Aqua Environmental Lab
E. coli	SM922D	379 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.	
Authorized Official: <u>TOM GORMLEY, ZONING ENFORCEMENT OFFICER</u>	
Signature: <u></u>	Date: <u>12.22.06</u>



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875
 Sample Date: 10/17/2006 3:00 PM
 Receipt Date: 10/17/2006 5:10 PM
 Report Date: 11/6/2006
 Sample Site: Stormwater

Sample ID#: 71944
 Sample Type: Test
 Sample Source: John Todd
 Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	379 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	13	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	0.56	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	<0.5	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.39	mg/L	No Limit Set	365.2t	None	10/25/2006
Total Kjeldahl Nitrogen as N	1.12	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	<1.4	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	58.5	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	31	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	7.1	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	190.5	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	110 *	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by:

CT Lic PH-0787

NY Lic 11706



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>TOWN OF REDDING</u>
Mailing Address: <u>PO BOX 1028, REDDING, CT 06875</u>
Contact Person: <u>TOM GORMLEY</u> Title: <u>ZEO</u> Phone: <u>(203) 938-8517</u>
Permit Registration # <u>GSM 000085</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>ADJACENT TO 50-53 DEER HILL ROAD</u>
Please circle the appropriate area description: Industrial, Commercial, or <u>Residential</u>
Receiving Water (name, basin): <u>SAUGATUCK RIVER, 7200</u>
Time of Start of Discharge: <u>10/17/06, 12:45 PM</u>
Date/Time Collected: <u>10/17/06, 1:20 PM</u> Water Temperature: <u>22</u>
Person Collecting Sample: <u>THOMAS J. BRAUN</u>
Storm Magnitude (inches): <u>0.20</u> Storm Duration (hours): <u>6 HOURS</u>
Date of Previous Storm Event: <u>10/12/06</u>

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	6.9	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	52 mg/L	Aqua Environmental Lab
Conductivity	120.1	259 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	2.4 mg/L	Phoenix Environmental Lab
COD	410.4	110 mg/L	Aqua Environmental Lab
Turbidity	180.1	21.4 NTU	Aqua Environmental Lab
TSS	160.2	40.8 mg/L	Aqua Environmental Lab
TP	365.2t	0.88 mg/L	Aqua Environmental Lab
Ammonia	350.2	<0.28 mg/L	Aqua Environmental Lab
TKN	351.3	2.80 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	<0.5 mg/L	Aqua Environmental Lab
E. coli	SM922D	85 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.	
Authorized Official:	<u>TOM GORMLEY, ZONING ENFORCEMENT OFFICER</u>
Signature:	<u></u> Date: <u>12.22.06</u>



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875

Sample Date: 10/17/2006 1:20 PM
Receipt Date: 10/17/2006 5:10 PM
Report Date: 11/6/2006
Sample Site: Stormwater

Sample ID#: 71940
Sample Type: Test
Sample Source: Deer Hill
Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	85 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	52	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	<0.28	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	<0.5	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.88	mg/L	No Limit Set	365.2t	None	10/25/2006
Total Kjeldahl Nitrogen as N	2.80	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	2.4	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	110	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	259	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	6.9	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	40.8	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	21.4 *	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by:

CT Lic PH-0787

NY Lic 11706



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>TOWN OF REDDING</u>
Mailing Address: <u>PO BOX 1028, REDDING, CT 06875</u>
Contact Person: <u>TOM GORMLEY</u> Title: <u>ZEO</u> Phone: <u>(203) 938-8517</u>
Permit Registration # <u>GSM 000085</u>

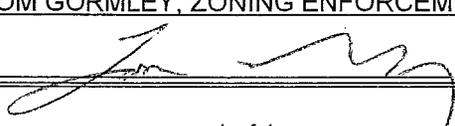
SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>ADJACENT TO 12 CRICKLEWOOD ROAD</u>
Please circle the appropriate area description: Industrial, Commercial, or <u>Residential</u>
Receiving Water (name, basin): <u>ASPETUCK RIVER, 7202</u>
Time of Start of Discharge: <u>10/17/06, 12:45 PM</u>
Date/Time Collected: <u>10/17/06, 1:00 PM</u> Water Temperature: <u>22</u>
Person Collecting Sample: <u>THOMAS J. BRAUN</u>
Storm Magnitude (inches): <u>0.20</u> Storm Duration (hours): <u>6 HOURS</u>
Date of Previous Storm Event: <u>10/12/06</u>

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	7.2	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	176 mg/L	Aqua Environmental Lab
Conductivity	120.1	426 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	<1.4 mg/L	Phoenix Environmental Lab
COD	410.4	36 mg/L	Aqua Environmental Lab
Turbidity	180.1	4.8 NTU	Aqua Environmental Lab
TSS	160.2	9.4 mg/L	Aqua Environmental Lab
TP	365.2t	0.27 mg/L	Aqua Environmental Lab
Ammonia	350.2	<0.28 mg/L	Aqua Environmental Lab
TKN	351.3	0.56 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	<0.5 mg/L	Aqua Environmental Lab
E. coli	SM922D	256 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.	
Authorized Official: <u>TOM GORMLEY, ZONING ENFORCEMENT OFFICER</u>	
Signature: 	Date: <u>12.22.06</u>



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875

Sample Date: 10/17/2006 1:00 PM

Receipt Date: 10/17/2006 5:10 PM

Report Date: 11/6/2006

Sample Site: Stormwater

Sample ID#: 71939

Sample Type: Test

Sample Source: Cricklewood

Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	256 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	176	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	<0.28	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	<0.5	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.27	mg/L	No Limit Set	365.2t	None	10/27/2006
Total Kjeldahl Nitrogen as N	0.56	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	<1.4	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	36	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	426	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	7.2	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	9.4	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	4.8	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by:

CT Lic PH-0787

NY Lic 11706



**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems**

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: TOWN OF REDDING
 Mailing Address: PO BOX 1028, REDDING, CT 06875
 Contact Person: TOM GORMLEY Title: ZEO Phone: (203) 938-8517
 Permit Registration #GSM 000085

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
ADJACENT TO 218 SIMPAUG TURNPIKE
 Please circle the appropriate area description: Industrial, Commercial or Residential
 Receiving Water (name, basin): SAUGATUCK RIVER, 7200
 Time of Start of Discharge: 10/17/06, 12:45 PM
 Date/Time Collected: 10/17/06, 2:50 PM Water Temperature: 22
 Person Collecting Sample: THOMAS J. BRAUN
 Storm Magnitude (inches): 0.20 Storm Duration (hours): 6 HOURS
 Date of Previous Storm Event: 10/12/06

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	150.1	7.2	Aqua Environmental Lab
Rain pH	150.1	5.5	Aqua Environmental Lab
Hardness	200.7	29 mg/L	Aqua Environmental Lab
Conductivity	120.1	52 uS/cm	Aqua Environmental Lab
Oil & Grease	413.2	2.0 mg/L	Phoenix Environmental Lab
COD	410.4	110 mg/L	Aqua Environmental Lab
Turbidity	180.1	50.1 NTU	Aqua Environmental Lab
TSS	160.2	98.4 mg/L	Aqua Environmental Lab
TP	365.2t	0.32 mg/L	Aqua Environmental Lab
Ammonia	350.2	0.56 mg/L	Aqua Environmental Lab
TKN	351.3	1.68 mg/L	Aqua Environmental Lab
NO ₃ +NO ₂	300.0	<0.5 mg/L	Aqua Environmental Lab
E. coli	SM922D	249 CFU	Aqua Environmental Lab

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: TOM GORMLEY, ZONING ENFORCEMENT OFFICER

Signature: _____ Date: 12.22.06



AQUA ENVIRONMENTAL LAB

56 Church Hill Road • Newtown, CT 06470 • (203) 270-9973

Report of Analysis

Name: Redding Health Department
 PO Box 1028
 Redding, CT 06875

Sample Date: 10/17/2006 2:30 PM

Receipt Date: 10/17/2006 5:10 PM

Report Date: 11/6/2006

Sample Site: Stormwater

Sample ID#: 71942

Sample Type: Test

Sample Source: Georgetown Saloon

Sampler: TJB

Parameter	Sample Result	Units	Limits	Method	MDL	Analysis Date
Biological						
MF e Coli Bacteria	1455 *	CFU	0	SM9222D	0	10/20/2006
Minerals						
Hardness	17	mg/L	No Limit Set	200.7	1	10/19/2006
Nutrient						
Ammonia as N	<0.28	mg/L	No Limit Set	350.2	0.2	11/3/2006
Nitrate as N	<0.5	mg/L	10	300.0	0.5	10/18/2006
Nitrite as N	<0.1	mg/L	1	300.0	0.1	10/18/2006
Phosphorus-T as P	0.34	mg/L	No Limit Set	365.2t	None	10/25/2006
Total Kjeldahl Nitrogen as N	1.68	mg/L	No Limit Set	351.3	0.2	11/3/2006
Organic Compounds						
Oil & Grease	4.4	mg/L	No Limit Set	413.2	0.5	10/26/2006
Oxygen Demand						
Chemical Oxygen Demand	106	mg/L	No Limit Set	410.4	5	11/3/2006
Physical						
Conductivity	112	uS/cm	No Limit Set	120.1	1	10/20/2006
PH	6.9	SU	2 - 10	150.1	0	10/18/2006
Suspended Solids	26.4	mg/L	No Limit Set	160.2	None	10/23/2006
Turbidity	22.8 *	NTU	5	180.1	0.05	10/19/2006

ND = Not Detected
 * = Above Specified Limit

Report Approved by 

CT Lic PH-0787

NY Lic 11706

APPENDIX C
Supporting Documents

blazed, and maintained properly and that lands and rivers are not being abused or littered.

- Support funding for municipal Household Hazardous Waste Collection Days and for a regional center for year-round collection.
- Spread the message about individual responsibility and cooperation to make a difference throughout your watershed down to Long Island Sound.

CONTACTS FOR INFORMATION:

Norwalk Watershed cleanups, volunteer and public programs, suggested plantings, list of invasive plants, lawn brochure, open-space map: Norwalk River Watershed Association - 203-846-8210
 Flooding and soils: Fairfield County Soil & Water Conservation District - 203-744-6108
 Gardening: UConn. Cooperative Extension System- 203-797-4376
 Open space or Household Hazardous Waste Collection Days: municipal Conservation or Environmental Commission
 Wells and septic: municipal Health Department

Also for general or specific topics:

USDA Natural Resources Conservation Service (NRCS): 203-787-0390
 CT Department of Environmental Protection (DEP): Information: 860-424-3000
 Emergency oil or chemical spill: 860-424-3338
 Leaking Underground Tanks: 860-424-3376
 Floods & Dams: 860-424-3706
 Household Cleaners: 860-424-3372
 Lawn & Garden Chemicals: 860-424-3369
 Pesticides: 860-424-3369
 Water Quality: 860-424-3020
 Water Softeners & Treatment: 860-240-9262
 Inland Fisheries: 860-424-3474
 Wildlife: 860-424-3011; Violations: 800-424-HELP
 Long Island Sound Programs: 860-424-3034
 EPA Office of L.I. Sound: 203-977-1541

A cooperative project of the Norwalk River Watershed Association and The Ridgefield Garden Club. This brochure was printed through a grant from the Albert W. and Helen C. Messer Memorial Fund. Permission is granted to reprint. The brochure is printed on recycled paper.

Norwalk River Watershed Association (NRWA)
 P. Norwalk River Watershed Assoc., 203-846-8210
 P. O. Box 197
 Georgetown, CT 06829

HOW TO MANAGE AND LANDSCAPE YOUR PROPERTY

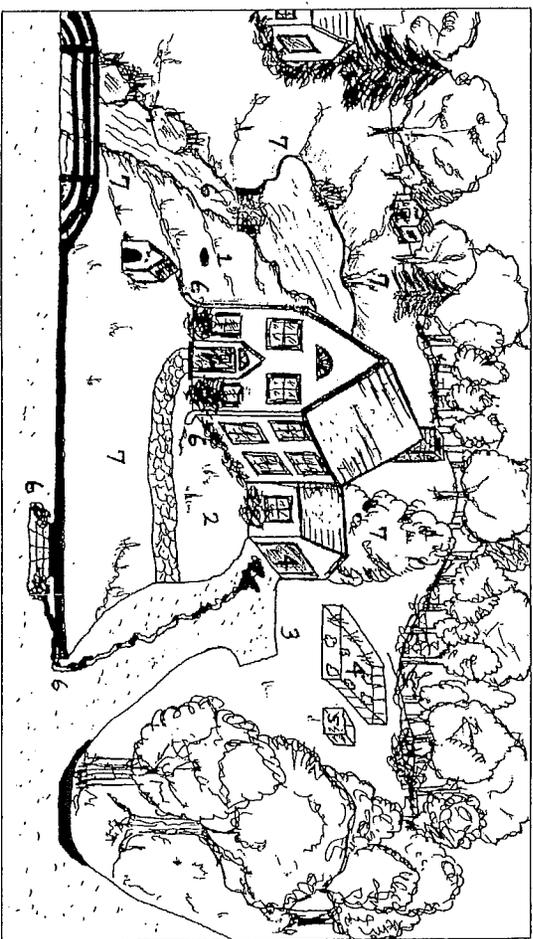
Whether you own or rent a home or business, certain basic management chores and techniques can improve the quality of your water and quality of life in the watershed where you live or work. An adequate supply of clean drinking water means personal health for you and your family and ensures thriving communities and property values. Knowing the facts for responsible management of your home and land makes you an asset to your community because each property affects the next.

This guide's information on a variety of essential topics, its Action Checklist of responsibilities, and list of contacts for further information will help you maintain and improve your property and its impact on your watershed and Long Island Sound.

ACTION CHECKLIST:

(See other side for more information.)

- Well
 - Protected from contamination from motor, driveway salt, garden, or household chemicals or from pet wastes or horse manure
 - Non-discharging water softener installed to prevent release of salty water into groundwater
 - Chemicals not flushed down the drain or poured on the ground, but disposed of properly or taken to a Household Hazardous Waste Collection Day
 - Water conserved
- Fuel Tank: Moved above ground or into basement or garage
 - Tank cleaned every 2-3 years or as necessary
 - Additives and chemicals avoided
 - Laundry loads staggered during week
 - Stormwater diverted from septic tank/field
- Septic System
 - Tank cleaned every 2-3 years or as necessary
 - Additives and chemicals avoided
 - Laundry loads staggered during week
 - Stormwater diverted from septic tank/field
- Hazardous Household/Garden Chemicals (from pesticides to paint thinners and more)
 - Reduced or eliminated, where possible
 - Remainder given to friend who wants it
 - Taken to Household Hazardous Waste Collection Day or disposed of properly
- Composting
 - Formal or informal program begun on your property to recycle your organic waste and to create rich soil and avoid littering
- Stormwater Runoff
 - Slowed by planted buffers, terracing, berms, or swales
 - Directed from roof and parking lots into ground to prevent direct discharge onto driveways and streets, into watercourses and wetlands, or into Long Island Sound
 - Porous materials used for "paved" surfaces
 - Bare soil covered, seeded, or mulched to prevent erosion
 - Litter and clogging sediment prevented from washing into storm drains, wetlands, and watercourses
- Landscaping
 - No fertilizers or pesticides used near well
 - Soils tested and chemicals reduced
 - Lawn areas decreased, mowing height increased
 - Vegetated buffers as large as possible installed on slopes and by wetlands and watercourses
 - Trees planted to combat heat, noise, wind
 - Native, non-invasive plants used
 - Invasive plants removed or controlled
- Community and Watershed Protection
 - Support funding for land purchase
 - Suggest specific land purchase to your local Conservation Commission or Land Trust
 - Support funding for Household Hazardous Waste Collection Days
 - Participate in river, beach, and open-space cleanups
 - Volunteer as River or Open-Space Ranger or Trail Maintainer to protect natural resources
 - Speak out on environmental issues and spread the message about responsible property management and landscaping.



Numbers on the diagram refer to Areas of Concern discussed in more detail on the reverse side of this brochure and to recommendations for improvement listed both there and on the Action Checklist.

AREAS OF CONCERN

1. Well and Drinking Water

Whether your drinking water comes from a private well or a public source, chemicals you put onto or into the soil can affect the quality of your water and that of your neighbors, as well as the health of your family and your property values. How water moves underground is not easy to see or predict. A few precautions can safeguard this essential resource.

- Do not pour old motor oil, gas, or anti-freeze on the ground or down the drain.

- Do not apply herbicides or pesticides near your well. Weed or remove pests by hand. Keep a can half filled with soapy water to receive Japanese beetles or other pests.

- Clear pet waste; remove kennel from near well.

- Prevent horse manure from leaching into water.

- Install a non-discharging water softener if you need to alleviate hard-water scale that restricts flow in pipes. Old systems frequently flush salty water into the septic system and groundwater. Salt can contribute to hypertension and other medical problems.

- Install a non-treated cold-water line at the kitchen sink for food preparation and drinking water.

- In winter, to protect your well and landscaping, chip ice or use sand, instead of salt, on walks/drives.

- Conserve water and save electricity. Fix leaks.

- Install low-flow toilets or place a clean plastic milk jug of water (not a brick) in the toilet tank to save water with each flush. Instead of baths, short showers with a water restrictor save many gallons. Run full loads in the dishwasher and washing machine. Instead of running water, refrigerate a water bottle for a cold drink.

2. Fuel Tank

Move your fuel tank above ground or into the basement or garage. With a predicted life span of 15-20 years in New England's acid soils, all-steel in-ground tanks can rust and leak. If you smell oil, taste oil in your water, or notice oil used at an unusual rate, contact your Health and Fire departments and oil company. Delay could be dangerous, and costly if a cleanup or new well is needed for you or your neighbor.

3. Septic System

A properly designed and functioning system allows "good" bacteria in the septic tank to work on the incoming effluent. Solids drop to the tank's bottom as liquid waste flows out of the chamber into the leaching area, where other bacteria in the soil help to reduce the fluid. (Keeping the wastewater on site adds to groundwater supplies and lessens flooding.) Those tank materials that will not decompose further must be pumped out before they build up, ooze into the leaching area, and cause the leaching fields to malfunction - threatening personal and public health, and necessitating costly repairs.

- Have the septic tank pumped by a licensed service every 2-3 years, or more often if your system or soil is not adequate for your needs, to prolong its life.

- Avoid septic additives.

- Do not pour hot fat, gasoline, paint thinner, or other chemicals down the drain. They will kill the "good" bacteria. Instead, pour fat into a can and refrigerate. When can is full, toss in trash. Participate in Household Hazardous Waste Collection Days.

- Remember: neither your septic system nor local sewage-treatment facility is equipped to handle chemicals that are not part of ordinary household waste.

- Reduce wastewater. Use low-flow toilets, eliminate leaky faucets, and stagger laundry loads each week, especially when soil is saturated from rain.

- Direct stormwater runoff away from your tank and leaching system.

4. Hazardous Household/Garden Chemicals

The best practice is to buy only those chemicals you need and to reduce or eliminate whenever possible. When you are finished with the material, give the remainder to a friend who needs it. Never pour chemicals on the ground or into a storm or sink drain. Local gas stations will frequently accept used motor oil. Other items may be taken to a Household Hazardous Waste Collection Day.

5. Composting

Provide a place on your own property for brush, leaves, grass clippings, garden waste, and vegetable peelings. These items should not be dumped onto public or private open space or onto a neighbor's land. These organic wastes also make excellent topsoil. Whether you pile the organics up and let them rot out over time or apply lime and water and turn the materials to hasten the process, composting is an inexpensive way to improve your soil, responsibly recycle organic waste, and avoid the early demise of any landfill.

6. Stormwater Runoff

Rainwater running off the land can contribute to non-point source pollution. Unlike point sources which can be more easily traced to a pipe, industry, or sewage-treatment plant, non-point sources are much harder to identify - because they are frequently found in salt, gas, and oil deposits on roads or parking lots; overfertilized lawns; pesticides; sediments from development; and failed septic systems. These substances can affect groundwater and swimming, fishing, and shellfish areas; clog wetland habitats and impede their cleansing and flood-control functions; impair wildlife; deplete oxygen and create unsightly, smelly algal ponds; and harm health and property values. Runoff directed to streams speeds the removal of fresh water from our groundwater drinking supplies and increases the potential for destructive flooding.

- Direct rain downspouts on buildings away from foundations, wells, septic systems, driveways, and roads into rain barrels, dry wells, or areas needing watering. At minimum, use splash guards to slow erosion at downspouts.

- Grade impervious surfaces toward your lawn or landscaped areas. Create swales or berms to direct water; terrace slopes to slow run-off; or bury a perforated pipe to a dry well to intercept flow.

- Use porous materials for sidewalks, patios, driveways, and parking areas to allow absorption.

- Besides gravel or bricks, there are new products, such as porous asphalt or concrete or plastic meshes which can form a seeded lawn that is strong enough to support cars and trucks and that can be moved or plowed by raising the machine blade one inch.

- Prevent litter from entering storm drains or waterways. Litter impacts health, wildlife, flood control, and aesthetics.

7. Landscaping

A well-landscaped yard can reduce runoff, flooding, and erosion; provide beauty and wildlife habitats; minimize time, money, and energy for maintenance; save on heating and cooling bills; and help protect water quality and quantity.

- Plant a large, deciduous shade tree off the SE and SW corners of your house to cool the house in summer and allow the sun to warm it in winter.

- Plant trees and shrubs to frame a view; screen unwanted sights or noise; provide privacy and wind breaks; hold a slope; or provide shade. Plant along contours or with terracing. Use mulch and ground-covers to retard weeds and retain moisture. Remember: the steeper the slope, the wider the landscaped buffer should be.

- Leave the widest possible streamside or wetland buffers in their native vegetation. Do not fertilize and do not remove leaf litter. To maintain a view of water, plant a high-grass or low-bush buffer mowed once a year. Buffers will shade surface waters, attract more fish, and discourage algal scums and geese and their waste and bacteria.

- Cover bare soil until seeded or planted to avoid silting up surface waters and wetlands.

- Minimize lawns. These high-maintenance areas do not contribute food or habitat for wildlife. Where you must mow, cut grass 2 1/2"-3" high with a mulching mower or cut often enough to allow clippings to fertilize. Water deeply once a week in early morning, if needed. Plant drought-resistant seed in fall. Cooler days and better moisture will stimulate healthier roots.

- Reduce lawn fertilizers. Test your soil with a soils kit from your hardware store or from the Cooperative Extension System to determine if lime or fertilizer is needed. If necessary, fertilize in October or November and never before a heavy rain that will wash the nutrients into wetlands or watercourses.

- Make paths to water sources curved and keep mulched to decrease runoff and soil erosion.

- Avoid planting invasives that are replacing the more productive native plants and threatening the biodiversity of wetlands, fields, and woodlands.

8. Community and Watershed Protection

Informed citizens are the protectors of their watershed. Your vocal support of responsible actions and necessary funding to implement important regulations and actions will make a positive difference to your property and community.

- Support purchase of land and easements that link open spaces and provide passive recreation; protect biodiversity; offer corridors for wildlife and people to enjoy; protect water quality and quantity; and reduce flooding and runoff.
- Participate in volunteer cleanups of rivers, beaches, and open spaces.
- Volunteer as a River or Open-space Ranger or Trail Maintainer to make sure areas are posted, (→)

TOWN OF REDDING

Highway Department

Bruce Sanford, Highway Superintendent



January 06, to Present
2005-2006

Drainage

Picketts Ridge Road

740' 15" pipe
20' 18" pipe
80' 12" pipe
7 36" sumps w/ lids
1 48" sump w/lid

Werf Drive

400' 18" pipe
2 48" sumps w/lids

Rock House Road

80' 18" pipe
2 48" sumps w/lids

Sport Hill Road

750' 18" pipe
820' 15" pipe
7 36" sumps w/lids
6 48" sumps w/lids

Umpawaug Road

100' 15" pipe
1300' 8" pipe
240' 12" pipe
5 36" sumps w/lids

Aquarion Water Company
of Connecticut
714 Black Rock Road
Easton, CT 06612
www.aquarionwater.com

203.452.3500 phone



AQUARION

Water Company

Quality Water for Life®

Mr. Thomas Gormley
Inland Wetlands and Zoning Officer
Town of Redding, Connecticut

November 15, 2006

Re: Aquarion Inspections in Redding.

Dear Mr. Gormley;

First, I must apologize for my tardiness in responding to your inquiry. The recent departure of my supervisor from Aquarion and the transfer of my assistant to another department within the Company have created some challenges in keeping up with all the tasks at hand.

Aquarion's watershed inspection program, which has been active for more than fifty years, has undergone significant changes during the last decade due to both the expansion of our watershed areas through the acquisition of other water supply systems and the implementation of filtration of all of our surface water supplies. Most notable among the changes to Aquarion's watershed inspection program is that we no longer inspect every one of our listed inspection sites annually. Based on a number of criteria that include proximity to a reservoir and zoned lot size, Aquarion's watershed inspection sites are now visited on a schedule of once every one, two or three years.

Prior to the revisions to our inspection program, Aquarion inspected approximately 700 homes, farms and businesses in Redding each year. Routine watershed inspections in Redding are currently conducted on a three-year rotational schedule, with an average of approximately 250 inspections performed annually. Additionally, Aquarion continues to frequently inspect sites such as active construction projects, horse farms and commercial areas within Redding that have a higher potential as pollution sources. I would estimate that we conduct at least fifty such inspections within Redding each year.

I hope this note answers the questions you had regarding Aquarion's inspections in the Town of Redding. If you require any additional information, please feel free to call me at 203-452-3508.

Sincerely,

Brian T. Roach
Senior Environmental Analyst



TOWN *of* REDDING, CONNECTICUT

Zoning Commission

10 Lonetown Road, P.O. Box 1028, Redding, CT 06875 Tel. (203) 938-8517 Fax (203) 938-5027

The Zoning & Wetlands Officer reviews all zoning applications, and issues all zoning permits for conforming uses and serves as an advisor to the Zoning & Conservation Commissions and the Zoning Board of Appeals. The office also fields numerous questions and performs reviews, which include changes and or additions to buildings and/or structures, signage, driveways, and tag sales among other issues. Our dealings also involve numerous contacts with contractors, engineers, including prospective homebuyers. The office also serves as the Wetland Officer for Conservation Commission and scenic Road Officer for Planning Commission.

The office is staffed by not only a ZEO but also by our Administrative Assistant Jean Winters who keeps everything in order. This year this office also hired a part time Assistant ZEO Dennis Tobin. The majority of his time is assigned to the GLDC project. Our office continues to experience a heavy workload in permits that is ongoing. In 2005 we issued a total of 214 permits. This year we have already issued a total of 147 permits as of November 1, 2006.

The Georgetown Land Development has been approved and initial work including expansion of the Sewer Treatment Plan is now on going. In addition this office is now coordinating and preparing The Phase II Stormwater requirements for the Town of Redding which is a requirement of the DEP.

This office looks forward to continue to serve the residents of the Town of Redding.

Tom Gormley, ZEO & Wetlands Officer

10/11/06

2006 Assistant Zoning Officer Stormwater Activities.

- Currently, the Town of Redding Zoning Department has conducted approximately 46 soil erosion and sediment control inspections @ Meadow Ridge Development, as of 10/11/06 and plans to continue weekly inspections throughout the year.
- The Town of Redding Zoning Department has issued 2 erosion and sediment control Notice of Violations @ Meadow Ridge as of this date.
- The Town of Redding Zoning Department has issued 2 Notice of Violations concerning soil erosion and sediment control violations @ the Georgetown Land Development site as of this date.
- The Town of Redding Zoning Department has conducted 17 soil erosion and sediment control inspections @ the Georgetown Land Development site as of this date and plan to inspect at least twice a week for the rest of the year.
- The Town of Redding Zoning Department has issued 2 soil erosion and sediment control enforcement action reports @ the Georgetown Land Development site as of this date.

The Town of Redding employs an assistant ZEO/Wetlands Officer for 25 hours a week to conduct soil erosion and sediment control inspections @ the Georgetown Land Development Site and the Meadow Ridge site, as of June 19, 2006.