

TOWN OF WINDSOR
STORMWATER MANAGEMENT PLAN



2008 Annual Report

December 30, 2008

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1.0 EXECUTIVE SUMMARY

In 2004, the Town of Windsor prepared a five-year Phase II Stormwater Management Plan (SWMP) as required by the Connecticut Department of Environmental Protection's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). This document constitutes the Town's Annual Report for 2008 and summarizes the activities conducted to satisfy the permit requirements, modifications to the SWMP, and activities scheduled for the upcoming year, 2009.

2.0 PUBLIC EDUCATION AND OUTREACH

2.1 Catch Basin Markers

To date, over 550 catch basin markers have been marked with a placard stating, "Drains to Waterways and the Long Island Sound, No Dumping!" These markers warn people that discharging harmful contaminants into a catch basin has a negative impact on the local wetlands and waterways as well as the Long Island Sound.

2.2 Educational Materials Distributed

Copies of the SWMP are available for public review at the Windsor Main Library, the Wilson Branch Library, and the Town Clerk's Office. The Town's website also contains a stormwater page which includes links to a copy of the SWMP and annual reports. A variety of other media outlets were also used to provide stormwater management information to Windsor residents over the past year. Feature articles and photos were published in local newspapers on the Earth Day and Connecticut River community clean-up efforts. These newspapers include the Hartford Courant, Windsor Journal, and Reminder News. Promotional information on these events as well as other stormwater management educational information was also broadcast on Windsor's Government Access Television Channel, WGTV.

In addition, the Town of Windsor publication, *There's a lot to do in Windsor* included public relations information for pool and outdoor hot tub owners regarding regulations for pool wastewater discharge and environmental education tips for residents regarding washing cars and watering lawns (Appendix A). Earth Day and Connecticut River Clean-up programs were also publicized in the

magazine to educate all citizens. This town magazine, published three times per year is mailed to every household and business in Windsor for a total distribution of 13,500.

2.3 Citizen Groups

Various local citizen groups and organizations have assisted the Town in developing partnerships with the public and increasing stormwater awareness. These groups include ING Community Service Volunteers and Four Seasons Landscaping (a local company). These groups continue to provide and/or have the capacity to provide public education resources on stormwater quality issues and continue to exist as support for future stormwater education programs in Windsor.

2.4 School Programs

This year a number of educational activities have been conducted with Windsor students. An eco-shopping lesson was given to the sixth grade students at Sage Park Middle School. Windsor also hosted this year's Envirothon at Northwest Park that featured a presentation on Biodiversity. Additionally, Northwest Park holds a variety of educational programs related to science and the environment with classes throughout the school year and during summer programs.

2.5 Activities Scheduled for Next Year

Activities planned for next year include:

- Install additional catch basin markers throughout Town.
- Expand educational resources.
- Solicit assistance from various citizen groups to help with education and outreach.
- Continued participating in school programs.

3.0 PUBLIC PARTICIPATION

3.1 Community Clean-Ups

The Town Environmental Planner conducted two (2) community clean-ups in 2008. A total of forty-nine (49) volunteers participated in the two clean-up events. The first event was conducted on April 18, 2008 and focused on collecting trash located along major roads throughout Town.

Approximately 2.1 tons of trash and twenty (20) tires were collected in the April 2008 event. The second clean-up was conducted on October 11, 2008 and focused on cleaning the banks of the Connecticut River. Approximately 0.6-ton of trash and ten (10) tires were collected at the October event.

3.2 School Programs

Students in Windsor public schools are encouraged to volunteer in environmental activities over the summer vacation, in addition to after-school activities. Some of these ongoing programs include:

- Recycling programs
- Earth Day celebrations
- Community clean-up events
- Science fairs

Additionally, Sage Park Middle School conducted a very active recycling program that included a competition to see which grade could reduce the most lunchtime waste. The winning eighth grade was treated to a field trip to Northwest Park where students had a scavenger hunt for wildlife, cleaned up trash along the park trails, and listened to a presentation given by the Town's Environmental Planner.

3.3 Stormwater Management Committee

In 2004 the Town established a Stormwater Management Committee to develop and implement the SWMP. Since that time, new members have joined the Committee. The Committee consists of the following Town employees:

- Thomas Lenehan, Town Engineer
- Victoria Houle, Project Engineer
- Cyd Groff, Environmental Planner
- Lauren Good, Assistant Town Planner
- Brian Funk, Public Works Director
- Enita Jubrey, Public Relations, Town Manager's Office
- Charles Petrillo, Director of Health Services

- Michael Pepe, Health Services

3.4 Public Meetings

The SWMP and Phase II Stormwater Program were presented at a Conservation Commission meeting in January 2005. This meeting allowed the public to review and comment on the SWMP. This year's annual report and previous annual reports are made available to the public on the Town's website.

3.5 Activities Planned for Next Year

Activities planned for next year include:

- Conduct community clean-up events in spring and fall.
- Recruit student volunteers and/or interested citizens to assist in the illicit discharge detection and elimination efforts within the Phase II regulated areas.

4.0 **ILLICIT DISCHARGE DETECTION AND ELIMINATION**

4.1 Outfall Mapping

In 2005, the Town completed the mapping of all stormwater outfalls of 12" or greater throughout town. The outfall maps include information on over 550 outfalls. These outfall maps include:

- Type, material, and size of the conveyance, outfall or channelized flow; and
- The name of the watershed in which the discharge is located.

The maps are available for review at Town Hall in the Engineering Department.

4.2 Illicit Discharge Detection Ordinance

A draft ordinance on Illicit Discharges was developed and will be brought to Town Council for adoption in early 2009. The objectives of the ordinance are:

- To regulate the contribution of pollutants to the MS4 by stormwater discharges by any user.
- To prohibit illicit connection and discharges to the MS4.

- To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with the ordinance.

Once the ordinance is adopted, the Town intends to develop and implement a plan to detect and address future non-stormwater discharges, including illegal dumping, to the MS4. Initially, the Town will evaluate the possibility of combining dry weather screening with the existing mosquito-control program conducted throughout Town during the summer months.

4.3 Activities Planned for Next Year

Activities planned for next year include:

- Update outfall mapping to include new outfall locations and to include the name and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges or the name of the nearest waterbody to which the outfall eventually discharges.
- Obtain Town Council approval and adopt the draft Illicit Discharge and Connection Ordinance.
- Develop and implement a plan to detect and address future non-stormwater discharges, including illegal dumping, to the MS4.
- Train employees to help them identify illicit discharges and properly report and address such discharges.

5.0 CONSTRUCTION SITE RUNOFF CONTROL

5.1 Development Reviews

Approximately thirty-two (32) applications for new development or redevelopment projects town-wide were reviewed and approved in 2008. Nineteen (19) of these applications were site plan revisions and reviewed by Town staff, the remaining twelve (12) were reviewed by the Planning & Zoning Commission. Town staff reviews all proposed developments with respect to stormwater quality impacts. Erosion and sediment control plans are required to be submitted for all development applications greater than 0.5-acre. Town staff works with developers and engineers for each individual project to determine which best management practices are most appropriate for

each site. Approval of the proposed erosion and sediment control measures by Town staff is required prior to the applicant's approval by the Town Planning & Zoning Commission. This practice will continue in following years.

5.2 Erosion and Sediment Control Ordinance

A draft ordinance on Erosion and Sediment Control was developed and introduced to Town Council on December 15, 2008. The Town Council has set a public hearing for January 20, 2009 to receive public input and to adopt this ordinance. The objectives of this ordinance are to safeguard persons, protect property, and prevent damage to the environment in the Town of Windsor by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that involves land disturbing activities of greater than 0.5-acre. Once adopted, the ordinance will formalize the existing Town staff review of erosion & sediment control measures to be utilized at various development sites.

In addition to the Erosion & Sediment Control Ordinance, a Stormwater Manual is being created for the Town to provide guidance on the preferred appropriate erosion & sediment control measures and the design parameters for each type of erosion and sediment control measures.

5.3 Activities Planned for Next Year

Activities planned for next year include:

- Continue the review of development and redevelopment applications with respect to stormwater impacts and erosion and sediment control measures.
- Obtain Town Council approval and adopt the proposed Erosion and Sediment Control Ordinance.
- Finalize the Town's Stormwater Manual.

6.0 POST-CONSTRUCTION STORMWATER MANAGEMENT

6.1 Development Reviews

Approximately thirty-two (32) applications for new development or redevelopment projects town-wide were reviewed and approved in 2008. Nineteen (19) of these applications were site plan

revisions and reviewed by Town staff, the remaining twelve (12) were reviewed by the Planning & Zoning Commission. Town staff reviews all proposed developments with respect to stormwater quality impacts and proposed stormwater management. The Town's Engineering Standards & Specifications, as well as the Town's Zoning Regulations, require that all new development or redevelopment projects ensure that stormwater is attenuated such that the post-development peak discharge rate is not greater than the pre-development rate for the 25-year, 24-hour frequency storm event. Additionally, extreme flood and public safety protection must be provided by controlling and safely conveying the 100-year, 24-hour return frequency storm event such that flooding is not exacerbated at each site.

Town staff reviews the drainage designs submitted for each application to ensure compliance with existing Town regulations. Additionally, Town staff work with developers and engineers for each project to determine which stormwater best management practices are most appropriate for each site. Approval of the proposed post-construction stormwater management design by Town staff is required prior to the applicant's approval by the Town Planning & Zoning Commission. This practice will continue in following years.

6.2 Stormwater Management Ordinance

A draft ordinance on Stormwater Management was developed and introduced to Town Council on December 15, 2008. The Town Council has set a public hearing for January 20, 2009 to receive public input and to adopt this ordinance. The objectives of this ordinance are to:

- Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
- Require that new development and redevelopment maintain the pre-development hydrologic response in their post-development state as nearly as practicable in order to reduce flooding, streambank erosion, non-point source pollution and increases in stream temperature, and to maintain the integrity of stream channels and aquatic habitats;
- Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;

- Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development stormwater management standards;
- Encourage the use of non-structural stormwater management and stormwater best site design practices, such as the preservation of greenspace and other conservation areas, to the maximum extent practicable, coordinate site design plans, which include greenspace, with the Town's Open Space and Agricultural Preservation Plan;
- Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and non-structural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety; and
- Establish administrative procedures for the submission, review, approval and disapproval of stormwater management plans, for the inspection of approved active projects, and for long-term follow-up.

Once adopted, the ordinance will formalize the existing Town staff review of proposed stormwater management designs through the administration of Stormwater Management Permits.

6.3 Best Management Practices

The Town of Windsor currently utilizes guidance from the 2004 Connecticut Stormwater Quality Manual for evaluating and selecting both structural and non-structural stormwater management measures. The Town is in the process of finalizing a Stormwater Manual which includes the specifications and standards for post-construction stormwater management. It is the Town's intention to expand the Stormwater Manual to include a list of best management practices preferred by the Town for use by developers, citizens, and staff.

6.4 Activities Planned for Next Year

Activities planned for next year include:

- Continue the review of development and redevelopment applicants with respect to proposed post-construction stormwater management design.

- Obtain Town Council approval and adopt the proposed Stormwater Management Ordinance.
- Finalize the Town's Stormwater Manual.
- Expand the Town's Stormwater Manual to include Windsor-preferred best management practices.

7.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING

7.1 Employee Training

Approximately thirty-five (35) Department of Public Works (DPW) staff (representing administrative and highway staff) received environmental-related training this year. The training included Chemical Hazard and Emergency Response and Right to Know training.

Stormwater training for DPW and other Town employees was conducted in December 2008. The training was conducted in conjunction with annual training required by the CT DEP's Industrial Stormwater Permit for the highway garage and parks garage. The training included education on goals and objectives of the Phase II program, pollution prevention for public works activities, waste management, and good housekeeping. A copy of the training handouts and employee attendance log is included in Appendix B.

7.2 Street Sweeping

All Town-owned roadways and parking areas were swept at least once during this year. Visual inspections and historical knowledge of roadways are used to identify streets within Town that require sweeping more than once per year.

7.3 Catch Basin Cleaning

The Town continued its efforts to clean Town-owned catch basins. In 2008 a total of 1400 catch basins were cleaned. The Town's current catch basin cleaning schedule is designed so that each catch basin is cleaned at least once during a three-year period. A program is being developed by Public Works staff and the Health Department to evaluate catch basins and other stormwater

structures that accumulate sediment at least once per year, including a provision to identify and prioritize those structures that may require cleaning more than once a year.

7.4 Preventative Maintenance

Routine preventative maintenance is performed at the highway garage on the Town's fleet of equipment and vehicles.

7.5 Windsor-Bloomfield Landfill

The Windsor-Bloomfield Landfill accepts household trash, recyclables, yard waste, waste motor oil, tires, appliances and bulky items such as furniture and mattresses. Over 15,200 tons of municipal solid waste was collected in 2008. Approximately 4,300 tons of demolition debris and 500 tons of scrap metal were collected. Over 900 tons of leaves and brush were composted. Furthermore, the 2008 MDC Household Hazardous Waste Collection Day included the collection of acids, aerosols, batteries (alkaline, lead-acid, lithium, and Ni-Cad), flammable liquids, fluorescent bulbs, mercury-containing items, pesticides, and PCB ballasts.

7.6 Activities Planned for Next Year

Activities planned for next year include:

- Continue providing environmental-related and stormwater management training to DPW and other Town staff.
- Continue sweeping Town-owned streets in spring after snowmelt.
- Continue cleaning catch basins.

8.0 STORMWATER QUALITY TESTING

The MS4 General Permit requires the Town to complete annual stormwater quality testing on six outfall locations which represent the overall nature of each respective land use type: industrial, commercial, and residential. Six outfall locations were selected in Windsor for stormwater quality testing in an attempt to cover different geographic locations, different watersheds, and different receiving waters.

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The following locations have been sampled annually since 2004 and were sampled in 2008:

- 800 Marshall Phelps Road (Industrial)
- 615 Day Hill Road (Industrial)
- 1075 Kennedy Road (Commercial)
- 555 Day Hill Road (Commercial)
- 124/128 Harvest Lane (Residential)
- 21-27 Philip Henry Circle (Residential)

The stormwater monitoring reports for 2008 testing are included in Appendix C.

APPENDIX A

Educational Materials Distributed

Summer "Green" Tips



As the weather warms and daylight hours are longer, things start to "green up" outside. Here are some simple things you can do to improve the environment in your town and some that will improve every town along the Connecticut River.

- If you wash your car at home, wash it on your lawn instead of the driveway to filter out the soap before it goes into the catch basin in the street. The water that runs into the catch basins flows directly into Rainbow, West, Phelps, Mundy Hollow, Meadow, Mill, Creamery, or Decker's Brooks and then into the Farmington or Connecticut River
- Retire your car or at least give it a day off each week. Every gallon of gas produces 20 pounds of CO2. Summer is a great time to walk.
- Plant new trees. Each tree removes an average of 13 pounds of carbon dioxide each year and converts it to oxygen
- Buy organic food. The chemicals used in modern agriculture not only pollute the water, they require energy to produce. Buying locally helps cut down on transportation and air pollution
- Insect repellent: don't use scented colognes, shaving lotion, shampoo, or deodorant when going outdoors; use chamomile tea as a lotion; burn citronella candles or mosquito coils, install a bat house

Call 285-1987 for more information on any of these summer "green" tips.

May 9: Windsor Youth Theatre, under the direction of Fran Elligers, is proud to present MGM's "**Wizard of Oz**" at the L.P. Wilson Community Center tonight and May 10, 15, 16 and 17 from 7:30 PM to 10:00 PM. A special Mother's Day matinee of the performance will be held Sunday, May 11 from 3:00 PM to 5:30 PM. \$10.00 for adults and \$7.00 for students and seniors. 688-8065.

May 10: The Windsor Garden Club's annual fund raiser, the "**Garden Mart,**" will be held on the town green near the library from

8:00 AM to noon. Hardy perennials from member gardens will be available to the public for a small donation. Come find the perfect plant for your garden! Baked goods will also be available. Proceeds go toward the WGC scholarship that is given to a Windsor High School student each year. New members are welcome. Free. 708-3001 (pager).

May 10: Free Day at the Landfill. See May 3 entry for details.

May 10: All cats and dogs three months of age and older must be vaccinated against rabies. Today from 2:00 PM to 4:00 PM a **Rabies Vaccination Clinic** will be held at the Blue Hills Fire District headquarters located at 1021 Blue Hills Avenue in Bloomfield. Written proof of prior vaccination for rabies or a current dog license must be presented to qualify for a three year certificate. A one year certificate will be given to all others. State law requires that all pets vaccinated for the first time in 2007 must be revaccinated in 2008. For everyone's safety, please ensure all dogs are leashed and all cats are in carriers. \$15.00 per animal, cash only. 285-1824.

May 10: You can help Windsor's Robotics program by bringing all bottles, cans, water bottles and juice containers to the Windsor Town Green in front of CVS from 9:00 AM to 3:00 PM for the **Can Drive for Team Paragon**. Free. Members of the team will be happy to pick up any recyclables at your home or business if you make arrangements ahead of time by calling 285-8904.

May 11: This timely Mother's Day **Plant Sale** from 11:00 AM to 1:00 PM (or until all flowering and decorative plants are sold) is held on the grounds of The First Church in Windsor, 75 Palisado Avenue. All proceeds will benefit the Heifer Project to help fight against poverty and hunger. 688-7229.

May 12: A **poetry writing group** for adults will meet at the Windsor Public Library on the second and fourth Mondays of the month from 6:30 PM to 8:30 PM through July 28. The sessions will be led by published poets Alice Williams and Janet Henderson. No experience is necessary and participants should bring six copies of each poem they wish to share with the group. Free. 688-5770.

May 12: Become a confident communicator at **Windsor Toastmasters**. Do you want to speak effectively in front of groups? Learn public speaking and leadership in our friendly and relaxed educational environment. We meet

from 7:00 PM to 8:30 PM at the L.P. Wilson Community Center. For more information call Doug 688-1192 or online at toastmasters.org

May 13: Windsor C.A.R.E.S. (Citizens Assisting Residents Everywhere by Sharing) meets today at the L.P. Wilson Community Center from 1:00 PM to 2:00 PM. Here's an opportunity to get involved in community service projects that benefit others such as making sandwiches for homeless people, adopting a family, preparing and serving a meal at a shelter and more. Volunteer for as little or as much as you can. Free. 285-1839.

May 13: The **Windsor Jaycees** meet tonight from 7:00 PM to 9:00 PM at the Union Street Tavern. The Jaycees meet every second Tuesday of the month. Our community activities include sponsorship of the annual Christmas tree sales, the Sheila Schmidt Special Ed Fishing Contest and the Shad Derby Parade and Festival on the Green. Proceeds from these events are used to fund other civic causes, such as scholarships for several Windsor High students. Anyone interested in volunteering for any of these events or learning more about the Windsor Jaycees is invited to contact Dan Kelly at president@windsorjaycees.com. If you are between the ages of 18 and 40 you are eligible to be a Jaycee. 836-6535 or www.windsorjaycees.com for more information.

May 13: The Windsor **Public Building Commission** will meet tonight from 7:00 PM until adjournment in the Ludlow Room at Town Hall. Free. 285-1870.

May 13: The Windsor **Town Planning and Zoning Commission** will meet tonight from 7:00 PM to adjournment in the Council Chambers at Town Hall. Free. 285-1980.

May 13: The Windsor Palette & Brush Club is sponsoring **Unusual Watercolor Techniques**, a free art demonstration by Vernon artist Judy Moakler, tonight from 7:15 PM to 9:30 PM in the art room at the L.P. Wilson Community Center. She will present a watercolor/mixed media demonstration on "painting with texture." All are welcome and refreshments will be served. Free. 688-1084.

May 14: The Windsor **Human Relations Commission** will meet tonight from 7:00 PM until adjournment in the Ludlow Room at Town Hall. Free. 285-1984.

EVERYONE

September 6: You can help Windsor's Robotics program by bringing all bottles, cans and water bottles to Bart's on Palisado Avenue from 9:00 AM to 3:00 PM for a **Can Drive for Team Paragon**. Also, you can get your car washed for \$5.00. Members of the team will be happy to pick up any recyclables at your home or business if you make arrangements ahead of time by calling 285-8904.

September 6: The Ellsworth Memorial Association will hold its annual **Colonial Ham & Bean Supper** at Matthies Hall on the grounds of the Oliver Ellsworth Homestead, 778 Palisado Avenue, today from 4:30 PM to 7:00 PM. The Connecticut Daughters of the American Revolution will serve a traditional colonial meal of ham, baked beans, potato salad, copper pennies, raisin bread, dessert and beverage. The supper will be accompanied by the music of the *Gaslight Gang* celebrating the Gay '90's through the Roaring '20's. \$10.00 for adults, \$5.00 for ages under 12. Proceeds benefit the Oliver Ellsworth Homestead. 688-8717.

September 6: Men's Basketball League begins. Put your best squad in and show your talent. Games will be played Saturdays at the 330 Windsor Avenue Community Center from 5:00 PM to 8:00 PM. Teams can have up to 10 players on their roster. Rosters must be handed in with team name and players by team captains. \$5.00 fee will be added for each out of town player. \$300.00 per team. 285-1990. Activity number 4213.001

September 7: Coinciding with the public school year, **Rally Day and Sunday school registration** at the First Church in Windsor occurs in the Parish House at 107 Palisado Avenue. Families with children may join us for Sunday School registration for pre-K through grade 8 students and a continental breakfast from 9:00 AM to 9:45 AM. Everyone is welcome to worship with us at 10:00 AM as we commission our Sunday School teachers and assistants. A Rally Day picnic immediately follows worship at 11:15AM with hot dogs, beans and fun for all! Handicap accessible. Free. 688-7229 or firstchurchinwindsor.com

September 8: With **Cardio Kickboxing**, you'll find martial arts combined with aerobic choreography in an energized class. Cardio Kickboxing meets at the L.P. Wilson Community Center on Mondays and Wednesdays from 6:30 PM to 7:15 PM through October 22. \$63.00. 285-1990. Activity number 4209.001

Information for pool and outdoor hot tub owners

Now that the warmest weather is over, there are some things you should know regarding the regulations for pool wastewater discharges. Swimming pool wastewater can contain chlorine, bromine or other cleaning compounds that can be toxic to aquatic life, even at low levels. Whether you or a hired contractor drain, backwash or clean the pool, certain criteria must be met before releasing pool wastewater into the environment.

Businesses that clean, drain or maintain private or public pools must register with the CT-DEP for a General Permit for the Discharge of Swimming Pool Wastewater. Owners of private residential pools do not have to register, but must comply with all conditions in the general permit. (Copies are available online at <http://www.dep.state.ct.us/pao/download.htm#SwimmingPoolGP>)

Swimming pool wastewaters may be discharged toward a stream or wetland, or into a storm drain (catch basin), provided the following conditions are met:

- The pH of the discharge shall be between 6.5 and 8.0 standard units.
- The total residual chlorine or bromine shall be non-detectable (less than 0.1 mg/l).
- The discharge shall not cause foaming or discoloration of any stream or wetland.
- No algae or sanitation control chemicals are used (other than bromine or chlorine based). Chemicals to adjust pH may also be used.
- The discharge shall not cause scouring of any stream or wetland.

Acid cleaning, pressure wash, or swimming pool filtration backwash wastewaters may not be discharged toward any stream, wetland, storm drain or catch basin.

Pool owners who live in the Farmington River Watershed and the Phelps Brook Watershed should be extra cautious as they are Windsor's cleanest waterways.

When in doubt, seek the advice of the CT-DEP, Bureau of Water Management, Permitting, Enforcement & Remediation Division at (860) 424-3018.

There are approximately 1,000 in-ground pools in Windsor and an unknown number of above ground pools and hot tubs. That's a lot of chemically treated water that could make its way into streams and wetlands and cause permanent harm if not properly discharged. Enjoy the pleasures of a pool, but please be environmentally responsible.

Brought to you by the Windsor Inland Wetlands and Watercourses Commission

September 8: A poetry writing group for adults will meet at the Windsor Public Library on the second and fourth Mondays of the month from 6:30 PM to 8:30 PM through December 22. The sessions will be led by published poets Alice Williams and Janet Henderson. No experience is necessary and participants should bring six copies of each poem they wish to share with the group. Free. 688-5770.

September 8: Cardio Step Vibe works major muscle groups in the lower body while it helps strengthen & condition the cardiovascular system. Routines help to increase bone density and strengthen tendons and ligaments. Program meets Mondays and Wednesdays from 5:30 PM to 6:25 PM through October 22. \$70.00. 285-1990. Activity number 4201.001

September 8: For a cardiovascular program designed to increase flexibility and strength in a low or non-impact environment, try **Water Fitness**. It meets at the Windsor High School pool from 7:30 PM to 8:30 PM each Monday and Wednesday through October 20. \$72.00. 285-1990. Activity number 4208.001

September 8: The Windsor Garden Club meets tonight from 7:00 PM to 9:00 PM at the L.P. Wilson Community Center. Visitors are welcome. Free. Call pager 708-3001.

September 8: Become a confident communicator at **Windsor Toastmasters**. Do you want to speak effectively in front of groups? Learn public speaking and leadership in our friendly and relaxed educational environment. We meet from 7:00 PM to 8:30 PM at L.P. Wilson Community Center. Free. 688-1192 or online at toastmasters.org

APPENDIX B

Stormwater Training Materials

Presentation to

Windsor Department of Public Works

ANNUAL STORMWATER TRAINING

Phase I and Phase II

December 2008



ANNUAL STORMWATER TRAINING

Victoria Houle
Project Engineer
Town of Windsor
275 Broad Street
Windsor, CT 06095



Annual Stormwater Training

US Environmental Protection Agency

- Phase I Stormwater Program - 1990
 - Designed to regulate discharges from municipalities with populations greater than 100,000 (Boston, Worcester, and Stamford, CT)
 - Construction sites greater than 5 acres
 - Stormwater discharges "Associated with Industrial Activities" (40 CFR 122.26)
- Phase II Stormwater Program - 1999
 - Targets small communities "urbanized areas"
 - Goal is to reduce the discharge of pollutants to the "maximum extent practicable"
 - Storm water plans must be in place by March 10, 2003
 - Plans must be fully implemented by March 10, 2005

Phase I Stormwater Program

CT DEP "General Permit for the Discharge of Stormwater Associated with Industrial Activity"

- Standard Industrial Classification Code
- Outdoor Material Storage

Windsor:

- Public Works Facility (99 Day Hill Rd)
- Parks Garage (69 Mechanic Street)
- Windsor-Bloomfield Landfill

Stormwater Pollution Prevention Plan

Pollution Prevention Team

- Designated personnel
- Contact information in SWPPP
- Responsible for:
 - Implementing
 - Maintaining
 - Revising the Plan



Stormwater Pollution Prevention Plan

Pollution Prevention Team

- Public Works Facility
 - Brian Funk
 - Wayne Radke
- Parks Garage
 - Brian Funk
 - Wayne Radke



Stormwater Pollution Prevention Plan

Description of Potential Pollutant Sources

- Activities and materials at the site
- Site Map
 - *Drainage Areas - Areas on-site that discharge to a common point or along a continuous line*
- Inventory of Exposed Materials
- List of Spills and Leaks (5+ gallons)
- Monitoring Program

Stormwater Pollution Prevention Plan

Potential Pollutant Sources

- Loading/Unloading Areas
- Roof Areas
- Outdoor Storage
 - Dumpsters
 - Aboveground Storage Tanks
- Outdoor Manufacturing or Processing
- Dust or Particulates
- On-site Waste Management Practices
- Vehicle Washing/Rinsing

Stormwater Pollution Prevention Plan

Public Works Facility

- Loading/Unloading Areas
 - Vehicle maintenance area (anti-freeze, detergents, cleaners, lubricants, waste oil, paints, mineral spirits)
 - Storage area (fertilizers, pesticides, cleaners, etc.)
 - Fueling area
 - Sand/Salt storage shed
- Outdoor Storage
 - Scrap metal, 2,500-gallon AST, tires, metal, solid waste
- Outdoor Manufacturing or Processing/Dust or Particulates
 - Salt and sand
 - Unpaved areas in dry weather

Stormwater Pollution Prevention Plan

Parks Garage

- Loading/Unloading Areas
 - Main building (gasoline, lubricants, paint, fertilizers, pesticides, heating fuels ASTs, de-icing chemicals)
 - Storage shed (de-icing chemicals, wood, metal)
- Outdoor Storage
 - Bleachers, picnic tables, topsoil, processed stone, wood chips, concrete, curbing, bricks, stone, sand)
- Outdoor Manufacturing or Processing/Dust or Particulates
 - Screening machine

Stormwater Pollution Prevention Plan

Pollution Prevention

- Good Housekeeping
- Sediment and Erosion Control
- Preventative Maintenance
- Spill Prevention / Response Procedures
- Employee Training
- Management of Runoff
- Inspections



Stormwater Pollution Prevention Plan

Good Housekeeping

- Promptly remove and REMEDIATE spills
- Maintain clean and dry FLOORS
- DO NOT store materials, containers, or equipment in pathways and walkways
- MINIMIZE outdoor storage/PROTECT materials
- CAPTURE WASTEWATER and prevent water from entering the stormwater system
- Properly DISPOSE of wastes
- PROHIBIT vehicle maintenance or washing outside with chemicals!!!!



Stormwater Pollution Prevention Plan

Good Housekeeping (continued)

- LIQUID wastes
 - Store indoors
 - Secondary containment:
 - Largest chemical container or
 - 10% of the total volume of ALL containers, whichever is LARGER
 - Store AWAY from floor drains and doorways

Stormwater Pollution Prevention Plan

Preventative Maintenance

- Routine Maintenance
 - Equipment maintenance in accordance with Manufacturer's Specifications
 - Stormwater drainage system
- Visual Inspections
 - Potential Pollutant Areas
 - Hazardous waste containers, ASTs, storage areas
 - Stormwater drainage system
 - E&S control measures



Stormwater Pollution Prevention Plan

Spill Response Procedures

- Spill Prevention ,Control and Countermeasure Plan
 - Spill response procedures
 - Spill response equipment and supplies
 - Spill notification requirements
 - Inspections of oil storage areas
 - Fixed storage
 - Mobile Storage
 - Oil-in-Use



Stormwater Pollution Prevention Plan

Spills

- DOCUMENT significant spills or leaks

" a list of spills and leaks of five gallons or more of toxic or hazardous substances as defined in Section 22a-430-4..."

Stormwater Pollution Prevention Plan

Sediment and Erosion Control

- Topography
- Land Disturbance Areas
- Erosion Controls
 - Structural
 - Vegetative
 - Stabilization Best Management Practices (BMPs)

Stormwater Pollution Prevention Plan

Management of Runoff

- Used to divert, infiltrate, reuse, contain, or otherwise reduce pollutants in discharges
- Runoff management practices
- Structural controls
 - Oil/particle separators
 - Infiltration/sedimentation basins
 - Retention/detention basins
 - Sumped catch basins
 - Grass swales

Stormwater Pollution Prevention Plan

Plan Implementation

- Update/revise SWPPP as necessary
- Employee Training
- Monitoring
- Inspections (Bi-Annual)
- Bi-Annual Comprehensive Site Compliance Evaluation

Stormwater Pollution Prevention Plan

Revisions to the SWPPP

- There is a change at the site which has an effect on the potential to cause pollution of the waters of the state
- The actions required by the Plan fail to ensure or adequately protect against pollution of the waters of the state
- The commissioner requests modifications of the Plan

Stormwater Pollution Prevention Plan

Employee Training

- All employees whose activities could impact the quality of stormwater runoff from the site
- Annual training
- Include objectives of the General Permit and the SWPPP
 - Oil handling and spill response procedures
 - Good housekeeping practices
 - Stormwater system maintenance
 - Inspection and monitoring requirements



Stormwater Pollution Prevention Plan

Monitoring

- Annual stormwater monitoring
 - Total oil and grease
 - pH
 - Chemical Oxygen Demand
 - Total Suspended Solids
 - Total Phosphorus
 - Total Kjeldahl Nitrogen
 - Total Copper
 - Total Zinc
 - Total Lead
 - Aquatic Toxicity
- Submit results in a Discharge Monitoring Report (DMR) to the DEP
- Representative outfalls
 - Public Works Facility (2 outfalls)
 - Parks Garage (1 outfall)

Stormwater Pollution Prevention Plan

How to sample

- Rainfall event > 0.1 inch
- Rainfall event occurs at least 72 hours AFTER previous rainfall event greater than 0.1 inch



Stormwater Pollution Prevention Plan

How to Sample (continued)

- Wear latex gloves
- Place an open container outside to collect rainwater and measure rain pH
- Collect stormwater runoff grab sample
 - Within 30 minutes of start of runoff*****
- Completely fill containers
 - Holding underneath outfall or using a clean scoop
 - Collect a sample free of sediment

Stormwater Pollution Prevention Plan

How to Sample (continued)

- Write the sampler name, sample number, sample location, date, and time on sample containers
- PLACE SAMPLES IN COOLER with ice or ice packs such that the sample temperature remains between 32°F and 40°F
- Complete a Chain-of-Custody for samples being submitted for laboratory analytical
- Samples MUST be analyzed within 7 days*



Stormwater Pollution Prevention Plan

Bi-Annual Comprehensive Site Compliance Evaluation

- Confirm the accuracy of potential pollution sources
- Determine the effectiveness of the Plan
- Assess compliance with terms and conditions of the General Permit
- Maintain record for at least five years



Stormwater Pollution Prevention Plan

Bi-Annual Comprehensive Site Compliance Evaluation

Public Works Facility

- Garage Area**
 - Chemical Storage/Use Area
 - Potential Discharge Outside
- Storage Shed**
 - Look for Sediment Run-off
 - Look for Sand/Salt Run-off
 - Make sure inactive piles are covered
- Fueling Area**
 - Check area and hose connections for evidence of leaks
- Emergency Generator Tank**
 - Check area and hose connections for evidence of leaks
- Catch Basins**
 - Should be clean and free of debris
- Stormwater Outfalls
- General Yard Cleanliness
- Evidence of Leaks or Spills

Stormwater Pollution Prevention Plan

Bi-Annual Comprehensive Site Compliance Evaluation

Parks Garage

- Garage Area**
 - Chemical Storage/Use Area
 - Potential Discharge Outside
- Storage Shed**
 - Look for Sediment Run-off
- Stockpiles**
 - Look for Sediment Run-off
- Erosion Controls**
 - Silt Fence/Hay Bales
 - Needed in Other Areas
- Stormwater Outfall
- General Yard Cleanliness
- Evidence of Leaks or Spills

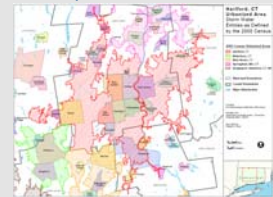
Stormwater Pollution Prevention Plan

QUESTIONS?



Phase II Stormwater Program

- EPA has identified approximately 105 Connecticut Communities for Phase II Permitting
- Municipal Separate Storm Sewer Systems (MS4) in "Urbanized Areas" (based on 2000 Census)



Phase II Stormwater Program

What does Phase II require?

- Each community must develop and implement a stormwater management plan
- The stormwater management plan includes six (6) minimum control measures:
 - *Public Education and Outreach*
 - *Public Involvement/Participation*
 - *Illicit Discharge Detection and Elimination (regulated area only)*
 - *Construction Site Runoff Control*
 - *Post-Construction Runoff Control*
 - *Pollution Prevention / Good Housekeeping for Municipal Operations*

Phase II Stormwater Program

Public Education & Outreach

- Requires a program to educate the public about stormwater quality and pollution prevention
- Take advantage of existing community meetings, school programs, environmental organizations, and citizen's groups
- Priority subwatersheds/regulated areas should be targeted
- Certain sources of pollution should be targeted
- Coordinate with local and state agencies
- Organize a local committee



Phase II Stormwater Program

Public Participation / Involvement

- Encourage public participation in pollution prevention tasks to improve program success
- A number of community resources are available that can help with program implementation
 - *Scouting*
 - *Citizen's groups*
 - *Environmental groups*
- Form a local committee to organize, oversee, and complete program tasks
 - *Adopt a stream*
 - *Volunteer water quality monitoring*
 - *Storm drain stenciling*
 - *Community river cleanups*
 - *Inventory Outfalls*



Phase II Stormwater Program

Illicit Discharge Detection and Elimination

- An illicit discharge is any non-stormwater discharge to an MS4, with some exceptions
- Examples of illicit discharges:
 - *Sanitary wastewater*
 - *Car wash wastewater*
 - *Improper car fluid disposal*
 - *Improper disposal of household toxics*
- Develop a storm sewer map
- Adopt an ordinance/regulation banning illicit discharges
- Implement a plan to identify and remove illicit discharges



Phase II Stormwater Program

Construction Site Runoff Control

- Existing municipal regulations may need modifications
- Requirements for contractors to control construction materials that may cause adverse impacts to water quality
- Procedures for site plan review which incorporates consideration of potential water quality impacts
- Procedures for receipt and consideration of information submitted by the public
- Procedures for site inspection and enforcement of control measures

Phase II Stormwater Program

Post-Construction Runoff Control

- Existing regulations may need modifications to address:
 - *Performance standards*
 - *Maintenance requirements*
 - *Enforcement*
- Develop and implement stormwater BMPs
- Ensure long-term operation and maintenance BMPs

Phase II Stormwater Program

Pollution Prevention / Good Housekeeping

- Develop and implement a municipal operation and maintenance program for the storm sewer system and municipal facilities such as DPW yards, schools, and recreation facilities
- A significant amount of maintenance is already performed by the DPW
- Programs developed or modified to address
 - Catch basin maintenance
 - Street sweeping
 - Spill prevention and response guidelines
 - Record keeping
- Implement an employee training program



Phase II Stormwater Program

Annual Report

- Due by Jan 1st of each year
- Information that must be included:
 - Self assessment review of compliance with permit conditions
 - Assessment of the appropriateness of the selected BMPs
 - Assessment of the progress toward achieving the measurable goals
 - Summary of results of any information that has been collected and analyzed
 - Discussion of activities for the next reporting cycle
 - Changes in identified BMPs or measurable goals

Phase II Stormwater Program

QUESTIONS?



EMPLOYEE CERTIFICATIONS

By signing this form, I hereby certify that I have received training, read and understood the goals and intent of this stormwater pollution prevention plan.

DATE	NAME (Printed)	SIGNATURE
12/29/08	Michael G. Deacon, 221	
12/29/08	Chris Bennett	
12/29/08	Peter O'Brien	
12-29/08	ELITIA FULLER	
12/29/08	Gene Giuliano	
12/29/08	Ray Chevalier	
12/29/08	MATT APANOVITCH	
12/29/08	Ted Mackham	
12/29/08	Brian Funk	
12-29-08	Clem F. Cusano	
12/29/08	Ron Lewis	
12/29/08	Rampersaud Mangal	
12/29/08	Peter Nicoletti	
12/29/08	Joseph Williams	
12/29/08	Enk Kopych	
12/29/08	Allan Goway	
12/29/08	Rich Mosher	
12-29-08	Steven Keddig	
12-29-08	CARL	
12-29-08	Bob Walker	
" "	Joe Costa	
" "	Russ White	
12/29/08	Fredolyszewski	
12/29/08	Taylor Towel	
12/29/08	JJ O'Shea	
12-29-08	Tom Blomquist	
12-29-08	James Goumi	
12-29-08	SHANTE GRAYWOLLI	

EMPLOYEE CERTIFICATIONS

By signing this form, I hereby certify that I have received training, read and understood the goals and intent of this stormwater pollution prevention plan.

DATE	NAME (Printed)	SIGNATURE
12/29/08	Mike Giacomazzi	
12-29-08	SHAWN GRAYWOOD	
12/29/08	Chris Bennett	
12/29/08	Peter O'Brien	
12/29/08	ELIJAH FULLER	
12/29/08	Gene Giuliano	
12/29/08	Ted Marcham	
12/29/08	MATT APANOVICH	
12/29/08	Ray Chevlier	
12/29/08	Brian Funk	
12-29-08	Coleen Cusano	
12-29-08	RON HEWIS	
12-29-08	Bob Dinallo	
12/29/08	Diana Eastwood	
12/29/08	Rompasuel May Jr	
12/29/08	Peter Nicoletti	
12/29/08	Emil Rogovich	
12/29/08	Joseph Williams	
12/29/08	Allen Goway	
12/29/08	Rich Mosher	
12-29	Jim Govoni	
12-29-08	Steven Redding	
12-29-08	Carl Mobley	
12-29-08	Bob Walker	
11 11	Joe Costa	
12-29-08	Russ White	
12/29/08	Fidel Olsewski	
12-29-08	Taylor Tower	
12/29/08	J O'Shea	
12/29/08	Marks Kease	

APPENDIX C

2008 Stormwater Monitoring Reports



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>
Contact Person: <u>Cyd Groff</u> Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration # <u>GSM</u> <u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
#2 – 124/128 Harvest Lane

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

Receiving Water (name, basin): Farmington River

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 9:32am Water Temperature: 15.6degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.09 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	6.46 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	23.1 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	48 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	12.8 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	15 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.10 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.21 mg/l	Phoenix Environmental Labs
TKN	E 351.1	1.2 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.11 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	2010 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer

Signature: Date: 12/29/08



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

9:32
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82731

Client ID: WINDSOR STORMWATER WINDSOR 2

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	6.46	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.007	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	2010	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	48	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	15	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	23.1	2.0	umhos/cm	09/30/08	0:57	JC	SM2510B
Ammonia as Nitrogen	0.21	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.11	0.01	mg/L	10/01/08	7:12	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	1.2	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.10	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	15	5.0	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	12.8	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	6.09	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	15.6		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
 October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration # <u>GSM</u>	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>#6 - 21/27 Philip Henry Circle</u>
Please circle the appropriate area description: Industrial, Commercial, or Residential
Receiving Water (name, basin): <u>Decker's Brook/Connecticut River</u>

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 10:43am Water Temperature: 16.2 degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.40 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	12 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	47.4 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	46 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	19.6 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	14 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.17 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.18 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.92 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.46 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	14140 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer</u>	
Signature:	Date: <u>12/20/08</u>



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

10:43
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82735

Client ID: WINDSOR STORMWATER WINDSOR 6

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	12	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.014	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	14140	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	46	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	10	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	47.4	2.0	umhos/cm	09/30/08	1:03	JC	SM2510B
Ammonia as Nitrogen	0.18	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.46	0.01	mg/L	10/01/08	7:17	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.92	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.17	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	14	5.0	mg/L	09/29/08	11:00	LK	SM2540D
Turbidity	19.6	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	6.40	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	16.2		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
 October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration # <u>GSM</u>	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
#5 – 800 Marshall Phelps

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

Receiving Water (name, basin): Mill Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 10:08 am Water Temperature: 16.1 degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08


MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.68 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	0.512 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	5.7 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	57 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	0.66 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	<5.0 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.02 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.05 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.23 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.01 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	100 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer

Signature:  Date: 12/2/08



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

10:08
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82734

Client ID: WINDSOR STORMWATER WINDSOR 5

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	0.512	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.004	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	100	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	57	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	< 1	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	5.7	2.0	umhos/cm	09/30/08	1:02	JC	SM2510B
Ammonia as Nitrogen	0.05	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.01	0.01	mg/L	10/01/08	7:15	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.23	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.02	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	< 5.0	5.0	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	0.66	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	6.68	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	16.1		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration #GSM	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
#3 - 615 Day Hill Rd

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

Receiving Water (name, basin): Mill Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 9:50am Water Temperature: 15.4degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.87 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	4.53 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	17.2 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	33 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	16.5 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	12 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.10 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.17 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.61 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.20 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	360 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer

Signature: Date: 12/29/08



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

9:50
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82732

Client ID: WINDSOR STORMWATER WINDSOR 3

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	4.53	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.027	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	360	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	33	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	10	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	17.2	2.0	umhos/cm	09/30/08	0:59	JC	SM2510B
Ammonia as Nitrogen	0.17	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.20	0.01	mg/L	10/01/08	7:13	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.61	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.10	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	12	10	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	16.5	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	6.87	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	15.4		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Windsor

Mailing Address: 275 Broad Street, Windsor, CT 06095

Contact Person: Cyd Groff Title: Environmental Planner Phone: 860-285-1987

Permit Registration #GSM 200401195

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
#1 - 1075 Kennedy Rd.

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

Receiving Water (name, basin): Farmington River

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 8:54am Water Temperature: 15.6degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	7.83 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	2.49 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	22.4 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	12 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	2.45 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	9.0 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.03 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.11 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.47 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.17 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	360 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer

Signature: [Signature] Date: 12/29/08



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date Time
 09/26/08 8:54
 09/26/08 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82730

Client ID: WINDSOR STORMWATER WINDSOR 1

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	2.49	0.10	mg/L	09/30/08	8:04	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.022	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	360	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	12	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	10	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	22.4	2.0	umhos/cm	09/30/08	0:56	JC	SM2510B
Ammonia as Nitrogen	0.11	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.17	0.01	mg/L	10/01/08	7:11	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.47	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.03	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	9.0	5.0	mg/L	09/30/08	11:25	LK	SM2540D
Turbidity	2.45	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	7.83	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	15.6		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration #GSM	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____
#4 - 555 Day Hill Rd.

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

Receiving Water (name, basin): Mill Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 9:59 am Water Temperature: 15.9 degC

Person Collecting Sample: Delores St. Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	7.15 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	3.22 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	15.2 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	78 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	5.67 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	<5.0 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.03 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.09 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.35 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.03 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	480 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer

Signature: _____

Date: 12/29/08



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

9:59
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82733

Client ID: WINDSOR STORMWATER WINDSOR 4

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	3.22	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.013	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	480	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	78	10	mg/L	10/02/08	0:00	KDB/MF	SM5220 D
Color	< 1	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	15.2	2.0	umhos/cm	09/30/08	1:00	JC	SM2510B
Ammonia as Nitrogen	0.09	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.03	0.01	mg/L	10/01/08	7:14	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.35	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.03	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	< 5.0	5.0	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	5.67	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	7.15	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	15.9		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration # <u>GSM</u>	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): _____ <u>EXTRA A – Bart's on Palisado Avenue</u>
Please circle the appropriate area description: Industrial, Commercial, or Residential
Receiving Water (name, basin): <u>Farmington River</u>

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 10:23 am Water Temperature: 16.6 degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	7.01 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	1.24 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	9.4 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.5 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	12 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	3.11 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	<20 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.22 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.08 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.32 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.06 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	960 /100 mls	Phoenix Environmental Labs

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 Lenehan, Town Engineer</u>	
Signature:	Date: <u>12/24/08</u>



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date

09/26/08
 09/26/08

Time

10:23
 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82736

Client ID: WINDSOR STORMWATER WINDSOR A

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	1.24	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	< 0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.012	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	960	10	/100mls	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mls	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	12	10	mg/L	10/03/08	0:00	KDB/LK	SM5220 D
Color	< 1	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	9.4	2.0	umhos/cm	09/30/08	1:05	JC	SM2510B
Ammonia as Nitrogen	0.08	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.06	0.01	mg/L	10/01/08	7:18	E/E	E353.2
Oil and Grease by EPA 1664	< 1.5	1.5	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.32	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.03	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	< 20	20	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	3.11	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	7.59	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	16.6		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008



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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: <u>Town of Windsor</u>	
Mailing Address: <u>275 Broad Street, Windsor, CT 06095</u>	
Contact Person: <u>Cyd Groff</u>	Title: <u>Environmental Planner</u> Phone: <u>860-285-1987</u>
Permit Registration # <u>GSM</u>	<u>200401195</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>EXTRA B - Rainbow Road at East Granby Road</u>
Please circle the appropriate area description: Industrial, Commercial, or Residential
Receiving Water (name, basin): _____

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 9/26/08 9:15 am Water Temperature: 15.4 degC

Person Collecting Sample: Delores St.Louis, TurnKey Compliance Solutions

Storm Magnitude (inches): 2.1 inches Storm Duration (hours): 18 hrs

Date of Previous Storm Event: 9/14/08

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	7.01 s.u.	Measurement Taken in Field
Rain pH	pH Probe	6.13 s.u.	Measurement Taken in Field
Hardness	S 2340 B	2.5 mg/l	Phoenix Environmental Labs
Conductivity	SM 2510 B	11.3 umhos/cm	Phoenix Environmental Labs
Oil & Grease	EPA 1664	<1.6 mg/l	Phoenix Environmental Labs
COD	SM 5220 D	15 mg/l	Phoenix Environmental Labs
Turbidity	E 180.1	4.32 NTU	Phoenix Environmental Labs
TSS	SM 2540 D	13 mg/l	Phoenix Environmental Labs
TP	E 365.2	0.07 mg/l	Phoenix Environmental Labs
Ammonia	S 4500 NH3	0.15 mg/l	Phoenix Environmental Labs
TKN	E 351.1	0.62 mg/l	Phoenix Environmental Labs
NO ₃ +NO ₂	E 353.2	0.19 mg/l	Phoenix Environmental Labs
E. coli	SM 9222 G	390 /100 mls	Phoenix Environmental Labs

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 Lenahan, Town Engineer</u>	
Signature:	Date: <u>12/24/08</u>



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report
 October 13, 2008

FOR: Attn: Mr. Mark Morgano
 Turnkey Compliance Solutions, L
 P.O. Box 243
 Cobalt, CT 06414

Sample Information

Matrix: WATER
 Location Code: TURNKEY
 Rush Request:
 P.O.#:

Custody Information

Collected by:
 Received by: LB
 Analyzed by: see "By" below

Date Time
 09/26/08 9:15
 09/26/08 11:28

Laboratory Data

SDG I.D.: GAQ82730
 Phoenix I.D.: AQ82737

Client ID: WINDSOR STORMWATER WINDSOR B

Parameter	Result	RL	Units	Date	Time	By	Reference
Hardness (CaCO3)	2.5	0.10	mg/L	09/30/08	8:05	GL	200.7
Lead	0.002	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Zinc	0.015	0.002	mg/L	09/29/08	10:36	J/E	6010/200.7
Escherichia Coli	390	10	/100mis	09/26/08	12:30	RB	SM 9223B
Total Coliforms	>24200	10	/100mis	09/26/08	12:30	RB	9223B
B.O.D./5 day	< 4.0	4.0	mg/L	09/29/08	19:24	K/R	SM5210B
C.O.D.	15	10	mg/L	10/03/08	0:00	KDB/LK	SM5220 D
Color	10	1	P.C.U.	09/29/08	23:00	CD	SM 2120B
Conductivity	11.3	2.0	umhos/cm	09/30/08	1:06	JC	SM2510B
Ammonia as Nitrogen	0.15	0.02	mg/L	10/02/08	13:44	WM	350.1
Nitrate-Nitrite (N)	0.19	0.01	mg/L	10/01/08	7:19	E/E	E353.2
Oil and Grease by EPA 1664	< 1.6	1.6	mg/L	10/02/08	0:00	MF	EPA 1664A
Nitrogen Tot Kjeldahl	0.62	0.1	mg/L	10/02/08	13:44	WM	E351.1
Phosphorus, as P	0.07	0.01	mg/L	10/02/08	6:07	EG	SM4500P E
Total Suspended Solids	13	5.0	mg/L	09/30/08	12:00	LK	SM2540D
Turbidity	4.32	0.20	NTU	09/26/08	22:30	M/J	E180.1
Total Metals Digestion	Completed			09/26/08	0:00	AG	
pH	7.01	0.10	pH Units	09/26/08	8:54	*	FIELD
Temperature; Field Analysis	15.4		deg. C	09/26/08	8:54	*	E170.1

Comments:

The temperature was performed at time of sample collection.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director

October 13, 2008