Town of Glastonbury

2155 MAIN STREET • P.O. BOX 6523 • GLASTONBURY, CONNECTICUT 06033-6523

February 20, 2007

Mr. Christopher Stone, P.E.
Stormwater Permit Coordinator
Bureau of Water Management
Department of Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

Re: MS4 General Permit – 2006 Annual Report
Application #200401149

Dear Mr. Stone:

Enclosed please find our 2006 annual report that describes our work over the past year towards compliance with the Town's MS4 General Permit. Also included is a check in the amount of $187.50 for plan review fees for the 2006 reporting year, as well as storm water sampling results for six locations sampled during 2006.

Based on the attached report, a summary of work to be completed in 2007 is as follows:

- January / March – Continue inspection of storm drain outfalls and development of outfall characterization data through use of GIS;
- March / April – Annual street sweeping and storm drain cleaning;
- April – Continue development of improved annual training program; begin providing lawn maintenance brochures as part of new lawn sprinkler installation applications;
- May – Investigate ongoing efforts by other community groups related to stream belt cleaning work in Glastonbury;
- June – Incorporate Stormwater Quality Information into Town Website. Prepare checklists for review of E&S plans and for E&S inspections;
- July – Begin dialog with board of Education regarding stormwater quality curriculum;
- September – Hold storm drain marker installation day;
- October – Conduct yearly stormwater sampling;
- November– Annual stormwater training for town staff using new training program.

If you have any questions or require any additional information, please contact me.

Sincerely,

Daniel A. Pennington, P.E.
Town Engineer/Manager of Physical Services

cc: Stephen M. Braun, Assistant Town Engineer

TOWN OF GLASTONBURY 2006 MS4 ANNUAL REPORT
MINIMUM CONTROL MEASURE PROGRESS

#1 - Public Education and Outreach

BMP ID	BMP Description	Scheduled / Revised Date	Status / Progress
1-1	Use print media to educate public	Spring 2006 (recurring)	Worked with local newspapers for coverage of 2 volunteer events for installing catch basin markers. Several articles covering events served to raise awareness for stormwater quality. Continue for catch basin marker event planned for 2007.
1-2	Research and provide educational links from Town web site	~~Fall 2006~~ Fall 2007	Town web site upgrade temporarily on hold. Will incorporate information into current web site this year and address conversion to new web site format in the future.
1-3	Lawn maintenance brochure	Spring 2007	No activity yet. Plan to begin distributing materials with lawn irrigation system permits in Spring 2007.
1-4	Partner w/ Board of Ed. to educate children	Spring 2007	No activity yet. Plan to initiate dialog with board of education this year to understand current curriculum and discuss possibilities for incorporation of Phase II information.

#2 – Public Involvement

BMP ID	Description	Scheduled / Revised Date	Status / Progress
2-1	Develop public involvement program	Spring 2005 (recurring)	See Item 2-3
2-2	Comply with state and local public notice and FOI	Ongoing	A copy of this annual report will be posted on the Town web site for review.
2-3	Public Hearing	Spring 2006 (once)	Complete - held public information meeting on May 3, 2006.
2-4	Adjust plan from public comments	Summer 2006 (once)	Complete - no comments received on plan from posting on Web site or public information meeting.
2-5	Clean stream belts by volunteers	~~Fall 2006~~ Fall 2007	Volunteer efforts this year were focused on storm drain markers. Will investigate stream belt work for next year.
2-6	Install storm drain markers	Spring&Fall 2006 Fall 2007	Held successful events on May 20 and September 30 that included work by 60 volunteers who installed approximately 2,900 storm drain markers. A single event is planned for Fall 2007 which will complete the entire Town.

TOWN OF GLASTONBURY 2006 MS4 ANNUAL REPORT
MINIMUM CONTROL MEASURE PROGRESS

#3 – Illicit Discharge Detection and Elimination

BMP ID	Description	Scheduled / Revised Date	Status / Progress
3-1	Map outfalls 15" and greater in urbanized area, inspect priority discharges.	2005-2008 (continuing effort)	IDDE Manual prepared by the Center for Watershed Protection was adopted for use with IDDE outfall inspections, and approximately 170 outfalls were inspected for signs of illicit discharge and to verify pipe size, material, and flow characteristics. Further inspection of outfalls is anticipated this year such that all of approximately 500 outfalls will be inspected within permit period. Use of GIS is also anticipated in the coming year to overlay outfall locations with water quality and surrounding land use data to develop remainder of necessary data.
3-2	Map outfalls 15" and greater town wide.	2006	Outfalls are mapped as noted previously. Inspection and database development effort will be as described in Item 3-1.
3-3	Map outfalls 12" and greater in urbanized area.	2007	Outfalls are mapped as noted previously. Inspection and database development effort will be as described in Item 3-1.
3-4	Develop program to detect and eliminate illicit discharges	Fall 2004 to Winter 2008	See item 3-1 above.
3-5	Develop illicit discharge ordinance	Summer 2005 to Winter 2007	No activity yet.

#4 – Construction Runoff

BMP ID	Description	Scheduled / Revised Date	Status / Progress
4-1	Review land use regulations for consistency with MS4 permit and E&S guide, issue report to identify deficiencies.	~~2004 / 2005~~ 2006	Town guidelines for construction run-off have been reviewed and a memorandum describing recommended changes is attached to this report.
4-2	Enact regulation revisions and ordinances	~~2006~~ 2007	Ordinance revisions are not required for this item.
4-3	Prepare library of Town preferred BMP's for distribution to contractors	2007	Complete. Library of BMPs provided in the 2002 CT Guidelines for Erosion and Sediment Control has been adopted for use and will be referenced in upcoming revisions to the applicable Town regulations.
4-4	Prepared design review checklist.	2008	No activity yet.

TOWN OF GLASTONBURY 2006 MS4 ANNUAL REPORT
MINIMUM CONTROL MEASURE PROGRESS

#5 – Post Construction Water Quality

BMP ID	Description	Scheduled / Revised Date	Status / Progress
5-1	Review land use regulations for consistency with MS4 permit and current water quality standards, issue report to identify deficiencies.	~~2004-2005~~ 2006	Town guidelines for post construction run-off have been reviewed and a memorandum describing recommended changes is attached to this report.
5-2	Enact regulation revisions and ordinances	2005-2008	Revisions to regulations are underway as described in the memorandum referenced under Section 5-1.
5-3	Study and issue a report detailing feasibility of incorporating BMPs into public and private projects.	2005-2008	This will be addressed as described in the memorandum referenced under Section 5-1.
5-4	Provide recommendations for ensuring long term maintenance of BMPs.	2005-2008	This will be addressed as described in the memorandum referenced under Section 5-1.

#6 – Good Housekeeping

BMP ID	Description	Scheduled / Revised Date	Status / Progress
6-1	Develop training program for municipal employees, train annually.	2004 (recurring)	Training for 2006 was not performed pending development of an updated in-house training program. Improved program is intended to combine training with site specific facility pollution prevention and spill prevention programs. New training program to be completed for implementation in November, 2007.
6-2	Sweep streets at least once per year as soon as possible after snowmelt.	Spring 2004 (recurring)	All streets swept in Spring of 2006.
6-3	Evaluate urbanized area for possible sweeping more than once per year	2008	No activity yet.
6-4	Clean storm structures as required by program described under Item 6-5.	Spring 2004 (recurring)	2,934 catch basins cleaned in 2006 by combination of Town staff private contractor. This represents cleaning of approximately 1/2 of all Town catch basins on a yearly basis.
6-5	Develop a program to evaluate and categorize catch basins and other structures for maintenance, including a field evaluation form and database for storm structures.	2006 - 2008	After further review, development of a program to categorize catch basins and track sump condition is not warranted. Sand use for winter road conditions has been nearly eliminated through use of "Clear Lane" treated road salt, and current program for catch basin cleaning appears to keep up with current usage.

TOWN OF GLASTONBURY 2006 MS4 ANNUAL REPORT
MINIMUM CONTROL MEASURE PROGRESS

#7 – Monitoring

BMP ID	Description	Scheduled / Revised Date	Status / Progress
7-1	Sample 6 priority outfalls once per year	Fall 2004 (recurring)	Sampling at 6 locations was completed on 10/28/2006 (data attached).

ATTACHMENT 1

MEMORANDUM ON
REVIEW OF EXISTING TOWN STORMWATER REGULATIONS AND POLICIES

February 16, 2007

MEMORANDUM

To: Daniel A. Pennington, Town Engineer/ Manager of Physical Services
John Rook, Town Planner
Tom Mocko, Environmental Planner

From: Stephen M. Braun, Assistant Town Engineer

Re: Review of Existing Town Stormwater Regulations and Policies

As discussed at our meeting on December 21, 2006, the EPA Phase II Stormwater Program and the related DEP MS4 permit require that a review of current town stormwater quality regulations be performed to determine any deficiencies relative to Construction Run-off Control and Post Construction Stormwater Management. The following memorandum presents such a review, including a summary of current efforts to update regulations as well as recommendations for changes to regulations for consistency with the requirements of these permits as discussed at our meeting.

1. Minimum Control Measure #4: Construction Run-off Control

1.1. Summary of Existing Town Regulations and Policies

There are several Town regulations and policies that address issues pertinent to construction site stormwater runoff control. Below is a list of pertinent regulations, policies, and procedures reviewed as part of this process and a brief description of relevant provisions.

Building Zone Regulations, Section 19

- Closely follows the model regulation formulated by the State of Connecticut and complies with State Law mandate.
- Requires certified control plan when disturbed area is more than 0.5 acre.
- Establishes minimum requirements and standards.
- Requires use/conformance to CT Guidelines for Soil Erosion and Sediment Control (1985), as amended, manual.
- Includes monitoring and inspection provisions.

Building Zone Regulations, Section 20

- Regulates proposed land uses by Town-wide design standards and specifications, by overlay protections zones, by special design standards and specifications in the overlay protection zones, and by special permit process.
- Prohibits new or replacement underground fuel storage tanks.
- Prohibits certain floor drain connections to storm sewers.
- Very conservative (exceeds State Health Code) standards and requirements concerning sites served by well and septic systems.

- Prohibits specified potentially polluting land uses in certain overlay protection zones.
- Requires specified land uses to be allowed only if connected to sanitary sewers or holding tanks.
- Requires nitrogen loading computations and sets loading limits in overlay protection zones, thus controlling long-term nitrogen inputs to water systems.
- Requires at least 50% maintenance of site's infiltration potential in overlay protection zones, thus attenuating imperviousness concerns that degrade surface water quality.
- Requires special considerations for proposed stormwater management facilities in overlay protection zones.
- Provides inspection and enforcement provisions.
- Exemption for farmers.
- Requires conformance to the Town's 1995 Plan of Conservation and Development which comprehensively details all natural resource/environmental concerns and goals.

Subdivision and Resubdivision Regulations

- Section 15 utilizes the same language as stated in the Zoning Regulations relative to erosion and sedimentation control.
- Requires conformance with 1995 Plan of Conservation and Development, as amended.
- Section 12 addresses storm drainage for streets and individual lots and addresses permits required for development within inland/wetlands regulated areas. Inspection and enforcement provisions are also included.

Wetland Regulations

- Include within the statement of purpose "...minimizing the disturbance and pollution to inland wetlands, watercourses and their associated conservation buffer areas; maintaining and improving water quality in accordance with the highest standards set by federal, state or local authority; preventing damage from erosion, turbidity or siltation;...and protecting the state's potable fresh water supplies from the dangers of drought, overdraft, pollution, misuse and mismanagement."

- Include within the definition of significant activities:
    - Any activity which causes or has the potential to cause substantial turbidity, siltation or sedimentation in a wetland or watercourse, or
    - Any activity which causes or has the potential to cause pollution of a wetland or watercourse;

- Include within the standards and criteria for rendering decisions "...recognition of potential damage from erosion, turbidity, or siltation, loss of fish and wildlife and their habitat, ... the dangers of flooding and pollution, and the destruction of the economic, aesthetic, recreational and public and private uses and values of wetlands and watercourses to the community;"

- Includes a provision for a separate surety bond to be provided for erosion and sedimentation control measures to be used in the event that the permittee does not adequately comply with the permit requirements.

1995 Plan of Conservation and Development, as amended

- Creates planning areas and policies.
- Creates resource categories and comprehensive goals for streambelts, wetlands and watercourses, floodplain management, groundwater protection, and stormwater management, especially dealing with water quality.

Policies and Procedures for Site Plan Reviews

- Administrative review process (staff level preliminary review).
- Informal review process by Conservation Commission/ Inland Wetlands and Watercourses Agency and Town Plan and Zoning Commission.
- Formal review process by Town Plan and Zoning Commission – public hearings as required by regulation.
- Filing of subdivision plans and special permits.
- Pre-construction meeting requirements.

1.2. DEP MS4 Permit Requirements:

Develop, implement, and enforce a program, or modify an existing program, to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre shall be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program shall include, but not be limited to, the development and implementation of:

1. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions for non-compliance, to the extent allowable under state or local law.

2. Procedures for notifying construction site developers and operators of the requirements for registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated With Construction Activities.

3. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices in accordance with the Guidelines.

4. Requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality.

5. Procedures for site plan review that incorporate consideration of potential water quality impacts.

6. Procedures for receipt and consideration of information submitted by the public.

7. Procedures for site inspection and enforcement of control measures.

1.3. Recommendations

For each required item outlined for Minimum Control Measure 4 of the MS4 Permit related to control of construction site stormwater run-off, a summary of applicable Town regulations and recommendation for changes or improvements is provided.

1. *"An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions for non-compliance, to the extent allowable under state or local law."*

   This requirement is sufficiently covered under the Zoning, Subdivision, and Wetland regulations mentioned previously. One suggestion is to modify the language in the Zoning and Subdivision Regulations to reference the more recent 2002 Guidelines for Erosion and Sediment Control rather than the 1989 manual as amended.

2. *"Procedures for notifying construction site developers and operators of the requirements for registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated With Construction Activities."*

   No procedure currently exists for this item. A notification process should be developed to address Item 2 listed above for all construction activities disturbing greater than 1 acre relative to the need to comply with the DEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated With Construction Activities. Developers proposing disturbance of over 5 acres of land should be notified that they must file a registration under this same general permit with the DEP. Suggested process is to include this as a standard condition of approval by the Town Plan and Zoning Commission and to mention this as a discussion item during the administrative review session.

3. *"Requirements for construction site operators to implement appropriate erosion and sediment control best management practices in accordance with the Guidelines."*

   A noted under Item 1, this requirement is sufficiently covered under the Zoning Regulations, Subdivision, and Wetland regulations mentioned previously.

4. *"Requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality."*

   This item is sufficiently covered under the Town Wetland Regulations, and in the following Town Ordinances: Section 19-22, which prohibits "discharge to any watercourse, pond, ditch or lake within the town or in any area under the jurisdiction of said town, any sanitary sewage, industrial wastes, or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this article."; Section 8-4, which states that it shall be "unlawful for any person to permit to be deposited or to deposit any solid waste

into or upon the banks or margin of any watercourse for any purpose whatsoever, nor shall any person throw or deposit any solid waste in any stream or other body of water."

5. *"Procedures for site plan review that incorporate consideration of potential water quality impacts."*

   The previously described procedures for multiple levels of site plan review by various authorities and Town staff members provides sufficient coverage of this item. To assist various Town staff with the review of erosion and sedimentation control plans, a checklist should be developed and incorporated into the Town review process.

6. *"Procedures for receipt and consideration of information submitted by the public."*

   Public notices and public hearings for all significant construction applications before the Town Plan and Zoning Commission and Inland Wetlands and Watercourses Commission are currently a part of the Town review process as noted previously and sufficiently address this item.

7. *"Procedures for site inspection and enforcement of control measures."*

   Site inspections are performed with regularity by the Engineering Department and Office of Community Development and erosion control measures are strictly enforced. To assist field investigators with this process, a checklist for E&S inspections would be beneficial and will be developed.

2. MINIMUM CONTROL MEASURE #5 - Post-Construction Stormwater Management in New Development and Redevelopment

2.1. Summary of Existing Town Regulations and Policies

Building Zone Regulations;

- Section 6.7 (Open Space Subdivision) – results in greater vegetated areas and reduced infrastructure (roads).
- Section 9 (Parking) – provides for deferral of parking areas for commercial projects and use of gravel parking for certain municipal uses.
- Section 19 (Erosion and Sediment Control) – provides mechanism for protection of wetlands/watercourses.
- Section 20 (Groundwater Protection) – provides infiltration requirements and provides mechanism for protection of groundwater resources within designated groundwater protection zones.

Subdivision and Resubdivision Regulations;

- Section 6 (Open Space Subdivison).
- Section 12 (Storm Drainage design requirements)
- Section 15 (Erosion and Sedimentation Controls).

Wetlands Regulations:

Provide for wetland area protection and regulatory powers for upland review area. Includes review and action on stormwater management designs.

Master Drainage Plan:

Provides Town-wide background information on watershed problems for use by Town staff during review of proposed stormwater management plans associated with development projects. Plan was prepared in 1981-1982, so information is dated.

Plan of Conservation and Development:

- Provides policy statements/BMPs for management and protection of wetlands and watercourses, floodplains, aquifers and relative to stormwater management.
- Encourages cluster/open space subdivision design for reduced infrastructure/paved areas and enhanced water quality.

2.2. DEP MS4 Permit Requirements:

1. Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or directly to waters of the State. This program shall ensure that controls are implemented to require appropriate infiltration practices, reduction of impervious surface, creation of or conversion to sheet flow, measures and/or structures to reduce sediment discharge and any other innovative measures that will prevent or minimize water quality impacts.

2. Develop and implement strategies that include a combination of structural and/or non-structural Best Management Practices (BMPs) appropriate for the municipality.

3. Use an ordinance or other regulatory mechanism to address the elements of subsection (1) above regarding post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law.

4. Ensure adequate long-term operation and maintenance of BMPs.

2.3. Recommendations

For each required item outlined previously for the MS4 permit for Minimum Control Measure 5 related to control of post construction stormwater management, a summary of applicable Town regulations and recommendations for changes or improvements is provided.

1. *"Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or directly to waters of the State. This program shall ensure that controls are implemented to require appropriate infiltration practices, reduction of impervious surface, creation of or conversion to sheet flow, measures and/or structures to reduce sediment discharge and any other innovative measures that will prevent or minimize water quality impacts."*

   Although there is currently no comprehensive regulation or town policy specifically addressing this item, provisions for stormwater quality are being implemented on a project by project basis through recommendations by Town staff using guidance from the DEP 2004 Connecticut Stormwater Quality Manual. Current efforts to revise policy documents are as follows:

   - Revisions to the Town's Plan of Conservation and Development are underway to create more flexible open space subdivision regulations, which will decrease infrastructure requirements and increase the amount of open space remaining.

   - Revisions to the Town's Wetland Regulations are underway to incorporate Stormwater BMP's and limit the amount of impervious area allowed for developments.

   - Revisions to the Town's Design Standards for Public Improvements are underway by this department, which will reference the new DEP water quality manual and recommend or require certain BMP's for new public infrastructure.

   - An update to the Town's Stormwater Master Plan document is recommended in the updated Plan of Conservation and Development and listed within the 5 year capital improvement program.

In addition to these efforts, it is recommended that the following regulations be revised to specifically address the need for installation and maintenance of stormwater quality BMP's as part of all commercial and residential developments:

- Section 12 of the Building Zone Regulations for all Special Permit Applications;
- Section 12 of the Subdivision and Resubdivision Regulations.

2. *"Develop and implement strategies that include a combination of structural and/or non-structural Best Management Practices (BMPs) appropriate for the municipality."*

   This item should be addressed as part of the revisions recommended previously for the above referenced documents.

3. *"Use an ordinance or other regulatory mechanism to address the elements of subsection (1) above regarding post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law."*

   This item should be addressed as part of the revisions recommended previously for the above referenced documents.

4. *"Ensure adequate long-term operation and maintenance of BMPs."*

   Section 20.13.4 of the Building Zone regulations requires a plan for long-term maintenance of BMP's within Groundwater Protection Zones. This requirement should be extended to all special permit applications and included under Section 12 of the Building Zone Regulations. This item should be addressed as part of the revisions recommended previously for the above referenced documents.

cc: Kenith Leslie, Director of Community Development

ATTACHMENT 2

2006 STORMWATER SAMPLING RESULTS

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration # GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #1 North of Crossroads Lane-East of Main Street (42" ACCMP Outlet)

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

Receiving Water (name, basin): Salmon Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 11:19-11:23 Water Temperature: 15.5 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.22 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	5.99 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	25 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	27 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	6.53 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	11 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	0.20 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.07 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	0.77 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	<0.01 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	>4,000 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A. Pennington Date: 1/30/07

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration #GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #2 North Side of Salmon Brook-West of Main Street (48" RCP Outlet)

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

Receiving Water (name, basin): Salmon Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 11:26-11:30 Water Temperature: 14.3 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.69 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	22.6 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	82 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	44 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	12.1 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	62 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	0.22 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.02 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	0.85 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	0.12 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	>4,000 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A Pennington Date: 1/30/07

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration #GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #3 150' North of Sequin Drive (42" RCP Outlet)

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

Receiving Water (name, basin): Salmon Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 11:00-11:06 Water Temperature: 15.2 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.33 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	5.57 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	31 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	11 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	11.2 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	16 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	0.62 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.03 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	0.41 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	0.04 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	220 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A Pennington Date: 11/30/07

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration #GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #4 400' South of National Drive 800' West of it's intersection with Eastern Boulevard (30" RCP Outlet)

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

Receiving Water (name, basin): Salmon Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 10:45-10:54 Water Temperature: 15.4 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.67 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	13.3 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	32 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	13 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	3.34 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	11 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	0.06 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.03 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	0.47 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	0.01 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	2,100 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A. Pennington Date: 1/30/07

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration #GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #5 400' West of Main Street across from Talcott Road (24" RCP Outlet)

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

Receiving Water (name, basin): Meadow Drain

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 11:38-11:46 Water Temperature: 15.3 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.53 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	8.72 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	35 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	51 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	16.1 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	26 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	1.1 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.03 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	1.4 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	0.01 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	>4,000 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A. Pennington Date: 11/30/07

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

Stormwater Monitoring Report Form

PERMITTEE INFORMATION

Town: Town of Glastonbury

Mailing Address: 2155 Main Street, Glastonbury, CT 06033

Contact Person: Robert Shirshac Title: Senior Engineering Technician Phone: 860-652-7742

Permit Registration #GSM000057

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): #6 300' South of Carriage Drive at it's intersection with Cutter Lane (30" RCP Outlet)

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

Receiving Water (name, basin): Smith Brook

Time of Start of Discharge: Approximately 8am

Date/Time Collected: 10/28/06 11:52-12:04 Water Temperature: 13.8 degC

Person Collecting Sample: Mark Morgano – TurnKey Compliance Solutions, LLC

Storm Magnitude (inches): >1 inch Storm Duration (hours): > 12 hours

Date of Previous Storm Event: Greater than 72 hours prior

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	pH Probe	6.61 s.u.	Field Measurement
Rain pH	pH Probe	6.14 s.u.	Field Measurement
Hardness	S 2340 B	19.4 mg/l	Phoenix Environmental Laboratories
Conductivity	SM 2510 B	60 umhos/cm	Phoenix Environmental Laboratories
Oil & Grease	EPA 1664	<1.4 mg/l	Phoenix Environmental Laboratories
COD	SM 5220 D	38 mg/l	Phoenix Environmental Laboratories
Turbidity	E 180.1	10.6 NTU	Phoenix Environmental Laboratories
TSS	SM 2540 D	43 mg/l	Phoenix Environmental Laboratories
TP	E 365.2	1.1 mg/l	Phoenix Environmental Laboratories
Ammonia	S 4500 NH3	0.05 mg/l	Phoenix Environmental Laboratories
TKN	E 351.1	1 mg/l	Phoenix Environmental Laboratories
NO_3+NO_2	E 353.2	0.17 mg/l	Phoenix Environmental Laboratories
E. coli	SM 9222 G	>4,000 /100 mls	Phoenix Environmental Laboratories

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: Daniel Pennington, Town Engineer/Manager of Physical Services

Signature: Daniel A. Pennington Date: 11/30/07

PHOENIX
Environmental Laboratories, Inc.

Monday, November 06, 2006

Turnkey Compliance Solutions LLC
P.O. Box 243
Cobalt CT 06414

Attention: Mr Mark Morgano

Sample ID#: AH64654-64659

This laboratory is in compliance with the QA/QC procedure outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, and SW846 QA/QC requirements of procedures used.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
NY Lab Registration #11301
RI Lab Registration #63
NH Lab Registration #213693-A,B
ME Lab Registration #CT-007
NJ Lab Registration #CT-003
PA Lab Registration #68-03530

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 ▪ Fax (860) 645-0823

PHOENIX

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

Analysis Report
November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	11:20
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH64654
Phoenix I.D.: AH64654

Laboratory Data

Client ID: TOWN OF GLASTONBURY 1

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	1.95	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	5.99	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	0.272	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	>4000	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	27	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	25	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.07	0.02	mg/L	11/02/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:16	EW	E353.2
Nitrate-N	< 0.01	0.01	mg/L	10/30/06	23:16	EW	E353.2
Nitrate-Nitrite (N)	< 0.01	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	0.77	0.1	mg/L	11/02/06		WM	E351.1
Phosphorus, as P	0.20	0.01	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	11	10	mg/L	10/27/06		0	SM2540D
Turbidity	6.53	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

Analysis Report
November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	11:30
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH64654
Phoenix I.D.: AH64655

Laboratory Data

Client ID: TOWN OF GLASTONBURY 2

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	7.15	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	22.6	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	1.15	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	>4000	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	44	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	82	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.02	0.02	mg/L	11/03/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:18	EW	E353.2
Nitrate-N	0.12	0.01	mg/L	10/30/06	23:18	EW	E353.2
Nitrate-Nitrite (N)	0.12	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	0.85	0.1	mg/L	11/03/06		WM	E351.1
Phosphorus, as P	0.22	0.01	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	62	5	mg/L	10/27/06		0	SM2540D
Turbidity	12.1	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

Analysis Report

November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	11:05
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH64654
Phoenix I.D.: AH64656

Laboratory Data

Client ID: TOWN OF GLASTONBURY 3

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	1.63	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	5.57	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	0.364	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	220	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	11	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	31	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.03	0.02	mg/L	11/03/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:19	EW	E353.2
Nitrate-N	0.04	0.01	mg/L	10/30/06	23:19	EW	E353.2
Nitrate-Nitrite (N)	0.04	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	0.41	0.1	mg/L	11/03/06		WM	E351.1
Phosphorus, as P	0.62	0.01	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	16	5	mg/L	10/27/06		0	SM2540D
Turbidity	11.2	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

Analysis Report
November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	10:50
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH64654
Phoenix I.D.: AH64657

Laboratory Data

Client ID: TOWN OF GLASTONBURY 4

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	4.75	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	13.3	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	0.352	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	2100	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	13	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	32	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.03	0.02	mg/L	11/03/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:20	EW	E353.2
Nitrate-N	0.01	0.01	mg/L	10/30/06	23:20	EW	E353.2
Nitrate-Nitrite (N)	0.01	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	0.47	0.1	mg/L	11/03/06		WM	E351.1
Phosphorus, as P	0.06	0.01	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	11	5	mg/L	10/27/06		0	SM2540D
Turbidity	3.34	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

Analysis Report
November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	11:40
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH64654
Phoenix I.D.: AH64658

Laboratory Data

Client ID: TOWN OF GLASTONBURY 5

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	2.33	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	8.72	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	0.705	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	>4000	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	51	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	35	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.03	0.02	mg/L	11/03/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:21	EW	E353.2
Nitrate-N	< 0.01	0.01	mg/L	10/30/06	23:21	EW	E353.2
Nitrate-Nitrite (N)	0.01	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	1.4	0.1	mg/L	11/03/06		WM	E351.1
Phosphorus, as P	1.1	0.02	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	26	10.0	mg/L	11/02/06		KL	SM2540D
Turbidity	16.1	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

Analysis Report
November 06, 2006

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

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		10/28/06	12:00
Location Code:	TURNKEY	Received by:	LB	10/30/06	14:30
Rush Request:		Analyzed by:	see "By" below		
P.O.#:				SDG I.D.:	GAH64654
				Phoenix I.D.:	AH64659

Laboratory Data

Client ID: TOWN OF GLASTONBURY 6

Parameter	Result	RL	Units	Date	Time	By	Reference
Calcium	6.08	0.01	mg/L	11/01/06		EKT	6010/200.7
Hardness (CaCO3)	19.4	0.10	mg/L	11/02/06		KC1	S2340B
Magnesium	1.02	0.01	mg/L	11/01/06		EKT	6010/200.7
Fecal Coliforms	>4000	20	/100 mls.	10/30/06	19:00	C/R	9222D
C.O.D.	38	10	mg/L	11/01/06		LK	SM5220 D
Conductivity	60	1.0	umhos/cm	10/31/06		MF	SM2510B
Ammonia as Nitrogen	0.05	0.02	mg/L	11/03/06		WM	S4500NH3
Nitrite-N	< 0.01	0.01	mg/L	10/30/06	23:22	EW	E353.2
Nitrate-N	0.17	0.01	mg/L	10/30/06	23:22	EW	E353.2
Nitrate-Nitrite (N)	0.17	0.01	mg/L	10/30/06		EW	E353.2
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	10/31/06		MF	EPA 1664
Nitrogen Tot Kjeldahl	1	0.1	mg/L	11/03/06		WM	E351.1
Phosphorus, as P	1.1	0.02	mg/L	11/03/06		JL	E365.2
Total Suspended Solids	43	10	mg/L	10/27/06		0	SM2540D
Turbidity	10.6	0.10	NTU	10/30/06	23:00	CD	E180.1
Total Metals Digestion	Completed			10/30/06		AG	

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

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

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

QA/QC Report

November 06, 2006

QA/QC Data

SDG I.D.: GAH64654

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 66702, Sample No: AH64722 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
ICP Metals - Aqueous								
Aluminum	BDL	NC	99.4	109	9.2	99.1	99.2	0.1
Antimony	BDL	NC	103	109	5.7	101	102	1.0
Arsenic	BDL	NC	102	111	8.5	104	103	1.0
Barium	BDL	3.20	103	111	7.5	102	101	1.0
Beryllium	BDL	NC	103	112	8.4	104	103	1.0
Boron	BDL	---	---	---	NC	---	---	NC
Cadmium	BDL	NC	103	112	8.4	103	102	1.0
Calcium	BDL	---	---	---	NC	---	---	NC
Chromium	BDL	NC	104	113	8.3	104	103	1.0
Cobalt	BDL	NC	104	111	6.5	102	101	1.0
Copper	BDL	NC	104	110	5.6	103	100	3.0
Iron	BDL	16.0	103	111	7.5	104	101	2.9
Lead	BDL	NC	106	114	7.3	104	104	0.0
Magnesium	BDL	---	---	---	NC	---	---	NC
Manganese	BDL	3.20	104	112	7.4	102	101	1.0
Molybdenum	BDL	---	---	---	NC	---	---	NC
Nickel	BDL	2.10	105	113	7.3	104	103	1.0
Phosphorus	0.018	---	---	---	NC	---	---	NC
Potassium	BDL	---	---	---	NC	---	---	NC
Selenium	BDL	NC	98.2	106	7.6	98.8	97.5	1.3
Silver	BDL	NC	104	111	6.5	101	102	1.0
Sodium	BDL	---	---	---	NC	---	---	NC
Thallium	BDL	NC	102	111	8.5	101	101	0.0
Tin	BDL	---	---	---	NC	---	---	NC
Vanadium	BDL	NC	106	114	7.3	105	105	0.0
Zinc	BDL	NC	101	110	8.5	102	102	0.0

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

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX

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

QA/QC Report

November 06, 2006

QA/QC Data

SDG I.D.: GAH64654

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 66860, Sample No: AH64376 (AH64654)								
Ammonia as Nitrogen	BDL	1.30	97.30			87.00		
QA/QC Batch 66860, Sample No: AH64376 (AH64654)								
Nitrogen Tot Kjeldahl	BDL	1.70	96.40			95.00		
QA/QC Batch 67047, Sample No: AH64508 (AH64654, AH64655)								
Phosphorus, as P	BDL	13.3	101.5			89.6		
QA/QC Batch 66888, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
C.O.D.	BDL	NC	102			98		
QA/QC Batch 66796, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrate-Nitrite (N)						92.4		
QA/QC Batch 66713, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrate-N	BDL	NC	96.2			93.1		
QA/QC Batch 66795, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrate-N	BDL	NC	96.2			93.1		
QA/QC Batch 66712, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrite-N	BDL	NC	103			90.6		
QA/QC Batch 66794, Sample No: AH64654 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrite-N	BDL	NC	103			90.6		
QA/QC Batch 66751, Sample No: AH64655 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Conductivity	BDL	1.2	104					
QA/QC Batch 66840, Sample No: AH64655 (AH64654, AH64655, AH64656, AH64657, AH64658, AH64659)								
Total Suspended Solids	BDL	6.7	101.1					
QA/QC Batch 67048, Sample No: AH64657 (AH64656, AH64657, AH64658, AH64659)								
Phosphorus, as P	BDL	0.0	104.8			95.6		
QA/QC Batch 66924, Sample No: AH64763 (AH64655, AH64656, AH64657, AH64658, AH64659)								
Ammonia as Nitrogen	BDL	16.50	104.00			99.40		
QA/QC Batch 66924, Sample No: AH64763 (AH64655, AH64656, AH64657, AH64658, AH64659)								
Nitrogen Tot Kjeldahl	BDL	4.80	95.10			107.00		

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

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
November 06, 2006

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: service@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp Pg of

Data Delivery (check one):
☐ Fax #:
☑ Email:
Format: ☐ Excel ☑ Pdf ☐ Gis Key

Customer:
Address:
Project:
Report to:
Invoice to:
Project P.O:
Phone #:
Fax #:

Client Sample - Information - Identification

Sampler's Signature
Date

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=Oil
GW=groundwater SL=sludge A=air X=Other

Analysis Request

Item #	Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled											Soil VOA Vial [ ] methanol [ ] Sod Bisulfate	GL Soil container( ) oz	GL Soil container( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
1		1	X			X																			
2		1	X				X	→																	
3		2	X			X																			
4		2	X				X	→																	
5		3	X			X																			
6		3	X				X	→																	
7		4	X			X																			
8		4	X				X	→																	
9		5	X			X																			
10		5	X				X	→																	
11		6	X			X																			
12		6	X				X	→																	

Relinquished by:	Accepted by:	Date:	Time:

Comments, Special Requirements or Regulations:

Turnaround:
- ☐ 1 Day*
- ☐ 2 Days*
- ☐ 3 Days*
- ☒ Standard
- ☐ Other

* Surcharge Applies

Requirements for CT/RI
- ☐ Res. Criteria
- ☐ GW Protection
- ☐ GA Mobility
- ☐ GB Mobility
- ☐ SW Protection
- ☐ Res. Vol.
- ☐ Ind. Vol.
- ☐ RCP Certification

Requirements for MA
- ☐ GW-1
- ☐ GW-2
- ☐ GW-3
- ☐ S-1
- ☐ S-2
- ☐ S-3
- ☐ MCP Certification
- ☐ Other