CITY OF RENSSELAER
RENSSELAER COUNTY, NEW YORK

STORMWATER MANAGEMENT PLAN

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Prepared With the Assistance

Of

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I. INTRODUCTION

The City of Rensselaer has developed, planned and implemented a Stormwater Management Plan to address pollutants of concern and reduce pollutant discharges from their small MS4 system to the maximum extent practicable, to protect water quality and to satisfy the appropriate water quality requirements of the Environmental Conservation Law and the Clean Water Act.

II. LOCAL LAWS

Municipalities in New York State have the power and responsibility for decisions that determine how the community uses not only its land, but also its water and other natural resources. The City of Rensselaer adopted Local Law entitled "Storm Sewer System Illicit Discharges, Activities and Connections" and Local Law entitled "Storm Water Management and Erosion & Sediment Control" to meet the requirement of the SPDES General Permit for Stormwater Discharges from MS4s (**Appendix A)**. This requirement ensures that local stormwater management programs meet the community's objectives for protecting public health and welfare, and take into account the individual locality's natural resources.

III. INTER-MUNICIPAL AGREEMENTS AND OTHER LEGAL AUTHORITIES

The City of Rensselaer is apart of an Intermunicipal agreement in order to meet the requirements of the Municipal Separate Storm Sewer Systems SPDES General Permit for Stormwater Discharges. Intermunicipal agreements are allowed under General Municipal Law Article 5-G, which states that two or more municipalities may enter into an agreement to undertake any activity that is allowed of individual municipalities under general or special laws. An Intermunicipal cooperation will enable the City of Rensselaer to share elements of their stormwater management programs with neighboring jurisdictions in the same watershed. Working through an Intermunicipal Cooperation costs and services are shared among the municipalities leaving only elements that are specific to the City of Rensselaer to be developed.

The City of Rensselaer currently participates in the Rensselaer County Communities Coalition. The Inter-Municipal Agreement is located in **Appendix B.** As a member of the Intermunicipal Committee, the City of Rensselaer will develop a sustainable IDDE program, understand MS4 permit requirements and establish a mechanism for long term funding.

IV. STAFFING AND STAFF DEVELOPMENT PROGRAMS

A: Staffing

The City of Rensselaer's stormwater management program responsibilities lie under several departments. Theses departments consist of the City Common

Council, a Planning Commission, Zoning Board of Appeals, Building and Planning Department and a Public Works Department.

The stormwater management responsibilities of the Common Council are to adopt local laws and authorize the actions of other municipal officials to mange stormwater.

The Planning Commission is responsible for approving subdivision and site plans, which includes the review of the Stormwater Pollution Prevention Plan and special use permits. The City Engineer (Laberge Group) will review the Stormwater Pollution Prevention Plan in accordance with the New York State Stormwater Design Manual and the New York State Erosion and Sediment Control Manual. The weekly Construction Site Inspections during construction will be performed by the Building Inspector. The Planning Commission has the authority to place conditions on approvals reflecting stormwater management goals.

The Zoning Board of Appeals is limited to interpreting the zoning law. When a Stormwater Pollution Prevention Plan is submitted as part of the application, the City Engineer (Laberge Group) will review the Stormwater Pollution Prevention Plan in accordance with the New York State Stormwater Design Manual and the New York State Erosion and Sediment Control Manual. The Building Inspector will perform the weekly Construction Site Inspections during construction. The Zoning Board of Appeals has the authority to place conditions on approvals reflecting stormwater management goals.

The Building Inspector has the responsibility of issuing building and other permits and enforces the law. The Building Inspector will perform periodic inspections of construction sites and post construction stormwater management practices as needed to assist the Stormwater Management Officier.

The Public Works Department has the responsibility of installing and maintaining storm drain systems and other stormwater management facilities, address erosion problems on roads and bridges, and carries out emergency maintenance. The City of Rensselaer's Planning Director is also the Stormwater Management Officer. The City of Rensselaer employs 25-30 staff members in the municipal Public Works Department.

B: Staff Development Program

The Director of Planning, Assistant Director of Planning, Superintendent of Public Works, Building Inspector, Code Enforcement Officer and other municipal personnel will attend yearly training. All training will be documented to ensure adequate training has been provided to each staff member based on their job responsibility.

DPW department will have quarterly stormwater training meetings consisting of watching training videos in a group setting. After the video, everyone takes a written exam. Additional stormwater training will be provided with OSHA meetings and seminars once a quarter. Personnel whom attend the seminars will train the personnel that did not attend the seminars.

Additional training will be provided to the Public Works Department including confined space and air quality monitor for confined space. The Stormwater Management Officer and Coordinator will attend monthly meetings and training sessions with the Rensselaer Counties Communities Coalition.

V. ORGANIZATION CHARTS

The Organization Chart for the City of Rensselaer is located in **Appendix D.**

VI. PROGRAM BUDGET

The City of Rensselaer has implemented a budget for the Stormwater Management Program. The budget is located in **Appendix E**. The budget includes costs such as cleaning catch basins, sweeping streets and sidewalks, brush and leaf pick up, weekly construction inspections, training, storm sewer television, inter-municipal agreement, and distribution of stormwater information.

VII. POLICY, PROCEDURES AND MATERIALS FOR EACH MINIMUM MEASURE

A. Minimum Control Measure 1: Public Education and Outreach

The City of Rensselaer will conduct ongoing public education and outreach about the impacts of stormwater on local waterbodies, the pollutants of concern and the steps that can be taken to reduce stormwater pollution.

The City of Rensselaer will promote a Pet Waste Program in one of the City's Park's, Riverfront Park, maintaining pet waste containers and signs in the area. The City of Rensselaer supplies free bags for the Pet Waste Program and document how many are used per reporting year.

The City of Rensselaer will distribute literature with building permits in regards to Erosion and Sediment Control. Direct Mailings of stormwater related issues will be mailed to tax payers and businesses.

Literature displays are located at the City Hall and at the Library for the public to pick up literature that interests them.

Project Wet Activity Booklets will be distributed during the summer recreation program and to the Boys and Girls Club beginning the summer of 2011.

DEFICIENCIES AND GOALS

DEFICIENCIES

1. No Pet Waste Program at River Front Park.
2. Number of Public Education Outreach Literature Program needs to be Increased.
3. Hotline Number Not Printed on All Materials.
4. Decrease in Number of Calls from Public in 2010-2011 Reporting Year.

GOALS

1. Pet Waste Program at River Front Park completed BY April 2013.
2. Mailings to Businesses completed by April 2012.
3. Literature at Public Library completed by April 2012.
4. Literature in Water Bills completed by April 2012.
5. Hotline number on printed education Material completed by April 2012.
6. Increase the Number of Stormwater Related Emails / Calls Each Year By 10%.

B. Minimum Control Measure 2: Public Involvement/Participation

The City of Rensselaer's goal is to increase the public involvement and participation. To achieve this goal the City of Rensselaer identified the contact person of the stormwater management program as the Director of Planning. The City of Rensselaer posts the annual report on the City website. The public is notified of the annual report in the local newspapers. The residents are encouraged to attend the public meeting where they can comment on the annual report.

The City of Rensselaer will promote a Pet Waste Program in one of the City's Park's, Riverfront Park, maintaining pet waste containers and signs in the area. The City of Rensselaer supplies free bags for the Pet Waste Program and document how many are used per reporting year.

The City of Rensselaer will encourage public involvement by sponsoring a highway clean up program, park clean-up event and reforestation programs as such as a rain garden and street trees. This will be evaluated by documenting the number of bags of garbage picked up along the highway, and the number of reforestation programs completed. The number of people attending these programs is sometimes difficult to document but an effort will be made.

Volunteers participate every year in the Capital Project. Starting 2011 the volunteers and amount of work will be documented.

The City will offer House Hazardous Waste Drop off day starting in 2012. City of Rensselaer will promote the Rensselaer County Hazardous Waste Day and E-Lots for unwanted computer equipment.

The municipal staff will be sent to storm water management training via seminars, workshops and also in house meetings. All stormwater management training will be documented. The staff that attends training will be responsible to train the other staff.

The City keeps the New York State Stormwater Design Manual and the Erosion and Sediment Control manual for training and reference at the City Hall.

DEFICIENCIES AND GOALS

DEFICIENCIES

1. No Pet Waste Program at River Front Park
2. No Summer Recreation Education Program
3. No Public Involvement Program-Social Groups, Public to Participate in Highway Clean up, Park Clean up Event, or rain gardens.

GOALS

4. Pet Waste Program at River Front Park completed by April 2013.
5. Hotline number on printed education Material completed by April 2012
6. Public Involvement Program-1 per year completed by April 2012.
7. Increase the Number of Stormwater Related Emails / Calls Each Year By 10%.
8. Literature at the Reading Program at the Library completed by 2011.

C. Minimum Control Measure 3: Illicit Discharge Detection Elimination

Definition of an Illicit Discharge

IDDE stands for Illicit Discharge Detection and Elimination. The term "illicit discharge" is defined in the City of Rensselaer's local law as entry into the Municipal Separate Storm Sewer System of "any materials other than stormwater" with some defined exceptions.

Illicit discharges can be categorized as either direct or indirect.

Examples of direct illicit discharges:

- Sanitary wastewater piping that is directly connected from a home to the storm sewer,
- Materials (e.g., used motor oil) that have been dumped illegally into a storm drain catch basin,
- A shop floor drain that is connected to the storm sewer, and
- A cross-connection between the sanitary sewer and storm sewer systems.

Examples of indirect illicit discharges:

- An old and damaged sanitary sewer line that is leaking fluids into a cracked storm sewer line, and
- A failing septic system that is leaking into a cracked storm sewer line or causing surface discharge into the storm sewer.

Typical illicit surface discharges that may be observed by field personnel include:

- Overflows of sanitary sewerage systems;
- Untreated radiator flushing wastewaters;
- Untreated engine degreasing wastes;
- Over-application of fertilizers, pesticides or herbicides onto landscaping and impervious surfaces;
- Dewatering of construction sites;
- Improper washing of concrete ready-mix trucks;
- Commercial use of soaps and detergents: used in cleaning pavement, vehicles and equipment outside;
- Latex/oil-based paints and solvents disposed of in gutters or inlets;
- Restaurant grease: improper disposal;
- Private/Public utilities improperly storing chemicals or maintaining equipment;
- Leaking dumpsters;
- Car lots for used and new vehicles dripping fluids on the pavement;

- Fuel spills;
- Hazardous materials dumped along the roadway; and
- Unidentified substances dumped in secluded areas.

WHY ARE IDDE EFFORTS NECESSARY?

Discharges from MS4s often include wastes and wastewater from non-stormwater sources. Illicit discharges enter the MS4 through either direct illicit connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to waters of NY State. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

IMPLEMENTATION RESPONSIBILITY

The City of Rensselaer Department of Public Works (DPW Commissioner or point person designated by the Commissioner), the MS4 Stormwater Officer (Planning Director), and City Engineer have primary responsibilities to cooperate and collaborate in the course of their normal duties and through special procedures listed here to identify and respond to potential illicit discharges.

MS4 INFRASTRUCTURE INVENTORY

PURPOSE

In order to effectively identify potential pollution sources it is essential to have basic data about the stormwater system components.

EXISTING DATA

In 2004, Clark Patterson Associates prepared a CAD based map of municipal storm, sanitary and combined sewer infrastructure. This comprehensive inventory included pipe routing, pipe diameters, pipe materials, stormwater inlet locations, and (many) outfall locations. In 2008 all stormwater outfall locations on this map were field-verified and several new discoveries were added to the inventory during annual dry weather monitoring. In 2009, storm sewer shed boundaries were mapped into the GIS system. In 2010, catch basin inlets were field-verified and digitized by hand from digital orthophotos into the GIS system. Additionally, data on surface waters, built stormwater practices, and municipally owned or managed facilities have been mapped. Businesses with activities having potential to act as pollutant sources have also been inventoried in the GIS system to help identify possible IDDE target areas.

PLANNED DATA COLLECTION

The City of Rensselaer Planning Office has purchased a Trimble GeoExplorer GPS Receiver to further map the MS4 drainage facilities (outfalls, catch basin inlets, and pipes) with sub-foot accuracy. A minimum of 33% of all municipal catch basins and manholes will be re-mapped at the higher accuracy, measurements taken of their dimensions, and pipe connections inventoried for the next 3 years until the digital system inventory is complete.

PLANNED AS-BUIILT DATA COLLECTION

As-built drawings provide location as well as feature information in a concise manner. The City of Rensselaer plans to require that as-built plans (electronic) with geo-references compatible with the municipal GPS system be submitted to document infrastructure location for all new development. This will allow the city to maintain a current, accurate source of information for the MS4.

UPDATES

In order to maintain a central, accurate database, the City Engineers and DPW Staff will collaborate with the Planning Office to identify and add to the system database any new information or changes as infrastructure is discovered, repaired or replaced. These updates should be in electronic or digital format whenever practical or feasible, and staff has received sufficient training to generate or edit this data.

PRIORITY AREAS

City of Rensselaer staff has identified priority areas that are considered to have potential to contain sources of illicit discharges. The categories below are considered while identifying priority areas for the City. Outfalls whose sewer sheds include priority areas or clusters of priority target uses will receive regular (annual) dry weather inspections. Primary outfalls (collecting from 4 or more catch basins) will generally have higher priority than secondary outfalls.

Commercial/industrial areas

These areas have been found in some communities' IDDE programs to (a) have significant numbers of illicit connections and/or (b) have discharges with a high potential to affect water quality (Tuomari, 1999 and Pitt et al., 1993). Specific business sectors can be prioritized (e.g., businesses subject to waste water pretreatment rules, businesses falling under certain Standard Industrial Classification [SIC] codes, or business sectors with a record of enforcement actions).

Clusters of businesses with individual NPDES permits may also be an indicator. Clusters of potential illicit discharge sources in the City of Rensselaer include the following target areas / uses: heavy industrial and fuel storage/loading sites in the port district; any automotive service station or automotive-related commercial establishment in the city – particularly those clustered along Columbia Turnpike, the Broadway business district, and South Street; and Laundromats.

Older areas of the City

Older development may predate more stringent construction codes regarding illegal connections and may have deteriorating sanitary sewer and/or storm sewer infrastructure that can lead to infiltration problems. In the course of regular maintenance and repair activities, DPW staff will check for evidence of illicit connections and report these to the DPW Commissioner, the Stormwater Officer, and City Engineer.

The Fort Crailo and Bath neighborhoods contain several significant historic structures while the largest concentration of structures built before 1850 are located in the blocks bounded by Broadway, Third Avenue, McNaughton Avenue, and Partition Street.

Areas where there have been repeated complaints

Areas where illegal dumping or apparently contaminated discharges have been repeatedly reported are obvious priority targets. To date the downtown business district has been identified by DPW staff as a source of multiple minor incidents.

The city has established a stormwater complaint hotline and notification system using the police dispatcher's office and DPW staff. Logging / documentation of

complaints and DPW response will help further identify priority areas where repeated complaints occur.

Locations identified from ambient water quality sampling data

The locations of high levels of particular contaminants (e.g., bacteria) can help to target priority outfalls. When an illicit discharge is suspected or identified through dry weather monitoring, the City of Rensselaer will obtain and send a 'grab sample' for laboratory testing. The following indicators will be tested: pH, ammonia, conductivity, surfactants, fluoride, & total coliform.

In order to accurately identify actual levels of POCs entering the MS4, water samples will be periodically obtained from all municipal storm sewersheds, particularly primary outfalls collecting from 4 or more catch basins. This sampling will also help indicate which geographic sections may have greater problems. If no significant hot spots of pollutant indicators are detected, then sampling and testing will provide useful background levels for future evaluations.

POLLUTANTS OF CONCERN

1. PCBs (Hudson River 303d listed)
2. Debris (litter / trash)
3. Sediment (vehicle traffic, air deposition, construction sites)
4. Sanitary system effluent
5. Petroleum products & other automotive chemicals
6. Nutrients (fertilizer, leaves, grass clippings, detergents, dumpster leachate)
7. Debris (litter / trash)
8. De-icing salts
9. Pesticides & Herbicides
10. Runoff volume (stresses CSO capacity)

Geographic Areas of Concern:

1. Upper Broadway (litter & sediment)
2. Columbia Turnpike (litter & sediment)
3. Downtown Business District (petroleum products, nutrients)
4. Upper Washington neighborhood (litter & nutrients and chemicals from larger lawns)

Target Audiences:

1. Residents (litter)
2. Auto Repair or Sales Establishments (petroleum & automotive products)
3. Homeowners (yard waste, de-icing salt, yard care chemicals, petroleum and automotive chemicals, detergents)
4. Private lawn and yard maintenance / landscaping contractors
5. Laundromats, car washes, auto detailers (detergents)

INFRASTRUCTURE INSPECTION SCHEDULE

Dry Weather Monitoring

A minimum of 20% of all MS4 outfalls will be inspected annually. All primary outfalls in identified priority areas will be inspected annually. Inspections will be carried out by Planning or DPW Staff as feasible. Inspections will only be conducted following a minimum of 48 hours or dry weather (1/10 of an inch of precipitation or less).

An outfall inspection form will be completed for each MS4 outfall pipe inspected and record maintained in the office of the Stormwater Officer. Additionally, all CSO outfalls will be inspected monthly by DPW and record maintained in their offices. Planning and DPW staff will collaborate to maintain the MS4 database to log and track inspections and identified issues.

Routine Maintenance Inspections

DPW staff will conduct annual inspections of all of the MS4 manholes following a minimum of 48 hours of dry weather as above. Frequency of inspections will be greater for high priority areas. These inspections will be recorded by field staff on DPW work orders and the information passed to the Planning Office for tracking using the MS4 database.

During the course of regular inspections and/or repair of catch basin inlets and manholes, DPW staff will also check for evidence of illicit discharge as indicated by unusual flow levels and/or visual indicators.

STORMWATER ISSUE RESPONSE PROCEDURE

Reporting of an illicit discharge in the City of Rensselaer MS4 will occur through dry-weather outfall inspections, observations during routine inspections or maintenance by DPW staff, citizen reports to the stormwater hotline or the City of Rensselaer web-site, or other miscellaneous means.

Stormwater Hotline

The City of Rensselaer MS4 hotline is the non-emergency police dispatch number of 462-7451, which is staffed 24/7. All public education and outreach materials prepared by the MS4 will include the hotline number.

If the Police Dispatcher on duty receives a report of an illicit discharge, spill, or other stormwater related complaint or issue, the following protocol will be followed:

- The dispatcher on duty will log basic information (date, time, reported location, license plate, nature of the issue)
- if a caller reports a spill over 5 gallons, the dispatcher on duty will initiate 911 response by the Fire Department per the City of Rensselaer Spill Response Plan
- the dispatcher on duty will contact the designated DPW point person by phone (as of 11/1/10: Jimmy Thomas at 944-0997) and relay the logged information
- the dispatcher on duty will send an e-mail containing the logged information to the central stormwater e-mail account (stormwater@rensselaerny.gov), which will generate an automatic message to the DPW point person, the Stormwater Officer, the DPW Commissioner, the Mayor, and any other individuals with roles in updating the MS4 tracking database.

IDDE RESPONSE PROTOCOL

1. After receiving report of a stormwater / spill / illicit discharge issue, the DPW MS4 point person will log the observed information (time, date, location, etc.), conduct a preliminary investigation of the site / source, and take photos OR cause the issue it to be investigated by other qualified municipal staff or contractors. The observer need not approach the potential violator at the time of the incident.
2. The DPW MS4 point person will assess if the reported issue constitutes a discharge.
    a. If discharge appears to be result of a discrete spill or illegal dumping event entering the sewer system, DPW MS4 point person will initiate formal spill response procedures and inform / mobilize DPW staff, City of Rensselaer Fire

Department, and/or designated contractors as specified in the written City of Rensselaer spill response plan.

b. If discharge is continuous and not the result of a discrete spill or illegal dumping, DPW MS4 point person will arrange for inspection (using tracing and tracking Standard Operating Procedures described in the following section) of suspect stormwater lines to identify source of outfall discharge. Inspection will be coordinated with Planning Department and City Engineer staff as needed to ensure proper documentation and verification of violation.

3. DPW MS4 point person will contact City Engineer and Stormwater Officer to jointly determine if illicit discharge represents a public nuisance per Chapter 145, Article II (subsection 145-24) requiring immediate summary abatement, elimination of MS4 access per Chapter 145, Article II (subsection 145-15), and/or voluntary as well as court-ordered compliance actions by the property owner/violator.

4. Stormwater Officer initiates and monitors notice of violation and fine process per Chapter 145, Article II (subsection 145-19) of the City of Rensselaer Code.

5. Stormwater Officer, City Engineer, and DPW MS4 point person participate in property owner / violator appeal to City Council per Chapter 145, Article II (subsection 145-20), if any.

6. City Engineer, Stormwater Officer, and DPW MS4 point person coordinate in follow-up inspections and/or oversight of alternative remedies per Chapter 145, Article II (subsection 145-23) to ensure abatement / compliance.

7. DPW MS4 point person will log the issue details, any city action taken to address it, and whether resolved or requiring follow-up action in DPW work orders and maintain a record. The DPW MS4 point person will provide a copy of completed work orders related to IDDE response to the Stormwater Officer.

STANDARD OPERATING PROCEDURES – TRACING AND TRACKING ILLICIT DISCHARGE SOURCES

Once reported, the methods below are the primary options for tracing illicit discharges in the City of Rensselaer MS4:

TRACING ILLICIT DISCHARGE SOURCES

1. Manhole Observation

A key tracing technique is to follow dry-weather flows upstream along the conveyance system to bracket the location of the source. Manhole observations can be time-consuming, but they are generally a necessary step before conducting other tests. Observations will be conducted through the following steps:

- Consult the MS4 infrastructure maps for any information that may be available for the area.
- Check the next manhole(s) with a junction "upstream" of the flow to see if there is evidence of discharge. If there are multiple flows into a junction, consider the sandbagging method below. Consider sampling each manhole that has a discharge.
- Repeat these steps until a junction is found with no evidence of discharge; the discharge source is likely to be located between the junction with no evidence of discharge and the next downstream junction.
- Observers should be aware of the surrounding areas and look for water in gutters and streets.

2. Sandbagging

This technique is helpful in tracing an illicit discharge where a junction has more than one "upstream" branch with some observed flow.

- Place sandbags only after 48 hours of dry weather ($1/10^{th}$ inch of rain or less).
- Place sandbags in the bottom center of the pipes entering a manhole junction and leave for an additional 24 to 48 hours of dry weather.
- Discharge that has pooled behind the sandbags can be visually observed for evidence of pollutants and a sample from each 'pool' taken for testing.

3. Video Inspection

Mobile video cameras can be guided remotely through storm sewer lines to observe possible illegal connections into storm sewer systems and record observations on a videocassette or DVD. City staff can observe the videos and note any visible illegal connections. This technique is time-consuming and expensive but thorough and usually definitive, and it does

not require the intrusion on members of the public that some of the other methods do. The City of Rensselaer has an informal agreement to use the Town of East Greenbush camera truck until it obtains its own camera system. Because of the time involved

4. **Dye Testing**

The test is relatively quick (about 30 minutes per test), effective (results are usually definitive), and cheap. Dye testing is best used when the likely source of an illicit discharge has been narrowed down to a few specific houses or businesses.

This technique involves flushing non-toxic dye into toilets and sinks and observing storm sewer and sanitary sewer manholes and storm sewer outfalls for the presence of the dye. Prior to performing this test, it is necessary to inform building owners and occupants in advance and gain permission for entry. Local public health and state water quality staff should also be notified so that they will be prepared to respond to citizens calling about any dye observed in surface waters.

To perform the test, a crew of two or more people is needed (ideally, all with two-way radios). One person is inside the building; the others are stationed at the appropriate storm sewer and sanitary sewer manholes (which should be opened) and/or outfalls. The inside person drops dye into a plumbing fixture (i.e., toilet or sink) and runs a sufficient amount of water to move the dye through the plumbing system. The inside person then radios to the outside crew that the dye has been dropped, and the outside crew watches for the dye in the storm sewer and sanitary sewer, recording the presence or absence of the dye.

MUNICIPAL STAFF ISSUE REPORTING

Field staff shall be observant in their daily routines to watch for evidence of illicit discharges into or unusual flows from the storm drain systems. Any municipal staff who identify or hear about potential illicit discharge into or from the stormwater system in the course of their daily duties or contact with the general public should contact the DPW MS4 point person, who will act by following the response protocol above.

Field staff should observe MS4 flows for odor, color, turbidity, and floatable matter. Unusual flows, pungent odors and discoloration or oil substances in the water, stains or waste residues in basins, ditches, channels, or drain boxes are indicators of an illicit discharge.

1. **Typical illicit surface discharges that may be observed by field personnel include:**
    - Overflows of sanitary sewerage systems;
    - Untreated radiator flushing wastewaters;
    - Untreated engine degreasing wastes;
    - Over-application of fertilizers, pesticides or herbicides onto landscaping and impervious surfaces;
    - Dewatering of construction sites;
    - Improper washing of concrete ready-mix trucks;
    - Commercial use of soaps and detergents: use in cleaning pavement, vehicles and equipment outside;
    - Latex/oil-based paints and solvents disposed of in gutters or inlets;
    - Restaurant grease: improper disposal;
    - Private/Public utilities improperly storing chemicals or maintaining equipment;
    - Leaking dumpsters;
    - Car lots for used and new vehicles dripping fluids on the pavement;
    - Fuel spills;
    - Hazardous materials dumped along the roadway;
    - Unidentified substances dumped in secluded areas.

SAFETY

City personnel should keep safety considerations at the forefront of observation procedures at all times. Likely hazards should be anticipated and avoided. City staff should never approach, contact, or sample a substance if the toxicity is at all suspect. Observations should be conducted in groups of two or more whenever possible.

City personnel should never open a sealed container to check the contents. If a highly toxic, flammable, or potentially dangerous substance is discovered, the field staff should leave the immediate area and contact the City Fire Department along with the DPW MS4 point person. If there is any question about a substance, municipal staff should contact a supervisor.

Safety conditions:

1. Do not lift the manhole with your back muscles. Use lifting procedures as outlined in OSHA regulations.

2. Wear steel-toed boots or safety shoes to protect toes, feet from possible crushing injuries that could occur while handing manhole covers.
3. Do not move manhole covers with hands or fingers (to avoid crushing injury of hands, fingers).
4. If manhole is located in a traffic lane, mark lane with traffic cones to give traffic adequate space to react and move around the work area. Wear safety vests or reflective clothing so that the employees will be visible to traffic.
5. Under no circumstances shall field staff enter a manhole, which is a confined space. Confined space entry can only be performed by properly trained and equipped personnel and when all OSHA Rules are followed. If a person has entered or fallen into the manhole DO NOT ENTER THE MANHOLE OR ATTEMPT A RESUCE. Contact the appropriate emergency personnel and the appropriate supervisor immediately.

TRAINING

All City DPW staff will be informed of these procedures as part of annual MS4 training. New hires will be informed as part of initial orientation by the DPWMS4 point person. City DPW staff with duties related to the MS4 system (catch basin cleaning, street sweeping, pipe repair / replacement) will be trained in basic IDDE identification.

Annual refresher/update trainings will also be scheduled with field staff to address any changes to and/or concerns with these procedures.

TRACKING ILLICIT DISCHARGE EVENTS

It is important that the appropriate information be gathered and documented when responding to an illicit discharge report. In some cases, the incident may require legal action. Legal enforcement and/or penalties may depend upon the integrity of the information that is gathered at the scene.

In extreme, rare cases, the incident could become the focus of a judicial process that would require the first staff person on site to provide valuable information, and possibly testimony and evidence. For that reason, it is necessary to be as thorough as possible on the initial investigation.

DPW staff investigating a potential illicit discharge will collect the information below and record them on work order forms. DPW staff will collaborate with planning staff to update the MS4 tracking database:

- Date and time of inspection,
- Type of inspection (routine or suspected illicit discharge),
- Location of facility inspected,
- Method of inspection

- Presence of illicit discharge, including:
  - Type of illicit discharge,
  - Source of illicit discharge,
  - Action taken, and
- Maintenance (needed or provided).
- Estimated cost(s) of actions or materials employed.

Equipment and Material for site visits by the field crews:

a. Dye (two colors)
b. High powered lamps/flashlights (fitted with backlights)
c. Manhole hook and crow bars
d. Site plans, building diagrams, and local seer maps
e. Standard operating procedure
f. Site visit forms
g. Log books
h. Name of contact at the facility
i. Camera
j. Safety Equipment (hard hats, eye protection, gloves, safety vests, steel-toed boots, traffic control equipment, protective clothing, gas monitor)
k. Two-way radio
l. Gas Monitor
m. Traffic Cones
n. Phone numbers
    1) Fire Department
    2) State and Local Police

LEGAL AUTHORITY

ILLICIT DISCHARGE ORDINANCE

In late 2007, the City adopted a model IDDE law as Chapter 145, Article II of the City Code (§145-8 to §145-25). While emphasizing education and voluntary compliance, this law empowers the City of Rensselaer to inspect and monitor, impose fines, block / remove illicit connections, and take emergency actions in order to stop illicit discharges in compliance with its MS4 permit requirements.

ALLOWED MS4 DISCHARGES

The following are not considered illicit discharges under the local law:

- Water line flushing / discharges from potable water sources
- Landscape irrigation / return flow
- Lawn watering
- Springs
- Dechlorinated swimming pool discharges
- Diverted stream flows
- Water from crawl space pumps
- Rising groundwater
- Footing drains
- Uncontaminated groundwater infiltration
- Uncontaminated pumped groundwater
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Foundation drains
- Air conditioning condensation
- Street wash water
- Water from fire-fighting activities
- Flows from riparian habitats and wetlands
- Discharge from any other water source not containing pollutants

1. PROHIBITED MS4 DISCHARGES

The following are considered to be illicit (illegal) discharges to the City of Rensselaer's MS4 (this list is not considered all inclusive):

a. <u>Sanitary wastewater sources such as:</u>

- Sanitary wastewater (usually untreated) from improper sewerage connections, exfiltration or leakage;
- Effluent from improperly operating or improperly designed septic tanks
- Overflows of sanitary sewer systems.

b. Automobile maintenance and operation sources such as:

 Untreated (e.g., through a well maintained oil/water separator) commercial car wash wastewaters;
 Untreated radiator flushing wastewaters;
 Untreated engine degreasing wastes;
 Improper oil, gasoline, and other automotive fluids disposal;
 Leaky underground storage tanks; and
 Untreated leaking of oils, gasoline and other automotive fluids for automobiles.

c. Landscape irrigation sources such as:

 Direct spraying of fertilizers, pesticides or herbicides onto impervious surfaces;
 Over-application of fertilizers, pesticides or herbicides onto landscaping.

d. Other sources such as:

 Laundry wastes;
 Non-contact cooling waters;
 Metal plating baths;
 Dewatering of construction sites;
 Washing of concrete ready-mix trucks;
 Contaminated sump pump discharges;
 Improper disposal of household toxic wastes;
 Spills from roadway and other accidents;
 Chemicals, hazardous materials, garbage, and sanitary sludge landfills and disposal sites;
 Commercial use of soaps and detergents; use in cleaning pavement, vehicles and equipment;
 Sediment from lack of or improper maintenance of erosion and sedimentation controls;
 Latex/oil-based paints & solvents;
 Trash and debris: littering and dumping, household or construction waste, leachate from garbage receptacles
 Restaurant grease - improper disposal.

DEFICIENCIES AND GOALS

DEFICIENCEIS

1. No Pet Waste Program at River Front Park
2. No Storm Drain Markers
3. Residential Trash are in bags
4. No Hazard Waste Days

GOALS

1. Pet Waste Program at River Front Park completed by April 2013
2. Storm Drain Markers inside curb completed by December 2012
3. Storm Manhole Covers Stamped with Drains to completed By 2017
4. Residential Trash required to be in covered Garbage Cans completed by April 2012
5. Hazard Waste Days completed by April 2013
6. All outfalls located and mapped completed by April 2014
7. Hotline number on printed education Material completed by April 2012
8. Catch basins cleaned yearly completed by April 2012
9. All Parks to have covered trash cans completed by April 2013
10. At DPW Garage cover catch basins next to creek during oil deliveries completed by April 2012
11. Post No Dumping signs at Quackenderry, Port Area, Railroad and Fort
12. Outfalls divided into 5 sections. One section inspected every 5th of the Month until all sections are inspected completed by December 2011
13. Outfall dry weather testing performed yearly completed October 2012
14. A file for each municipal facility will be kept. Each file will contain self-audits, floor plans, inspections, and documentation of spills completed by December 2012
15. Semi-annual training on spills and stormwater issues of all DPW staff completed by 2012
16. All reports of stormwater, spill or discharge issues will be investigated by the City within 24 hours. A report will be filled out stating date and time of notification and of response, outcome of investigation. On a yearly basis, actual response time and policy response time will be evaluated completely by December 2012.

D. Minimum Control Measure 4: Construction Site Stormwater Runoff Control

The City of Rensselaer has adopted a local law to reduce pollutants in storm water runoff from construction activities that disturb one or more acres of land or are part of a larger plan of development. This requirement applies to redevelopment as well as to new development.

The City of Rensselaer requires construction site operators to prepare Stormwater Pollution Prevention Plans for controlling construction site pollution and erosion/sedimentation as well as implementing the controls specified in the Stormwater Pollution Prevention Plan. The City of Rensselaer has established local ordinances for stormwater management which require erosion and sediment control best management practices to be implemented. All State Plans are reviewed by the City Engineer in accordance with the New York State Stormwater Design Manual and the Erosion and Sediment Control Manual. Any of the Site Plans that require a full Stormwater Pollution Plan will require having a SWPPP Acceptance Form signed by the Stormwater Management Officer.

The procedure the City of Rensselaer will use to receive and consider information from the public is encouraging public comments during the Planning Commission meetings on individual projects. The public can also contact the Stormwater Management Officer with comments or complaints related to storm water or illicit discharge or illegal dumping. A hotline number is on the City of Rensselaer's website.

Pre-construction meetings are required with the City of Rensselaer prior to start of construction. The trained contractor individual training certification card must be provided at that time as well as the NOI Acknowledgement letter, signed Contractor certification and a pre-construction inspection is performed. Construction inspections will be performed by the storm water management officer or code officer on a monthly basis. The qualified inspector hired by the developer/contractor must submit copies of their weekly SWPPP Inspections to the Stormwater Management Officer. Any enforcement required will be handled through the Code Enforcer or the Stormwater management Officer.

The construction site will be inspected prior to the Notice of Termination by the Code Enforcement Officer. Prior to issuing a certificate of occupancies, the owner must provide an O & M Manual with as-builts. The City of Rensselaer required post-construction structures to be privately owned.

A record system has been developed to document items such as catch basin cleaning, television of the storm sewer, staff training, annual inspections of storm water structures, and public complaints.

Annual training is required for Engineers, Building Inspectors, Code Enforcers, and other municipal personnel to keep appraised of storm water regulations and proper prevention techniques of water quality. The Code Enforcer has taken the 4-hour training course for the train contractor.

E. Minimum Control Measure 5: Post Construction Site Stormwater Management

The City of Rensselaer local law requires review of post-construction stormwater management measures in the Stormwater Pollution Prevention Plan. Post construction stormwater control is required with a combination of stormwater management practices consistent with technical standards in the New York State Stormwater Management Design Manual. The operator is required to establish responsibility for and ensure ongoing maintenance of structural or non-structural management measures needed to control post-construction stormwater. Inspection of the stormwater management measures and practices will be preformed annually to ensure compliance to the City of Rensselaer's local laws. Enforcement will be in accordance of the local law.

The owner must provide an O&M prior to receiving a certificate of occupancy. The O&M must include as-builts as well as a maintenance schedule. The Code Enforcer or the Department of Public Works will inspect the post construction stormwater management practices to ensure the maintenance schedule is being followed. Any owner that has a practice that is not cleaned of silt and sediment will be notified. If the owner then fails to clean the practice, enforcement of the local law will take place.

Starting in the 2011-2012 reporting year, stormwater management areas will be inventoried and inspected. Stormwater management practices not being maintained were received an unsatisfactory inspection report, and the owner will be notify to address the issues within 2 weeks.

F. Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

The intention of this document is to provide policies and guidelines to reduce pollution from municipal activities and properties. This document is expected to be a living document and should be changed as situations and practices change. The document should be reviewed regularly, so that its contents are refreshed regularly, both in the mind of the reader, and in the binder in which it is kept. New practices, good documentation and other additional information should be added as a matter of habit, with updates performed on all copies in the municipal offices

and workplaces. A master copy should be kept at the Stormwater Coordinator's Office to make sure that one complete copy exists.

Pollution Prevention

Following these basic rules will reduce pollution and save taxpayer money. They will also lead to a more efficient operation of government.

Prevent Pollution at its Source

Controlling pollutants at their source and preventing their wider release is more efficient and cost-effective than removing them from stormwater runoff or other water treatment after the fact. Remove or capture contaminants before stormwater contact. Prevent erosion; and provide multiple barriers to pollutant releases at storage and waste sites.

Manage Clean Water Runoff and Minimize Pollutant Exposure to Clean Water

Prevent clean water runoff and precipitation from contacting potential pollutants and prevent mixing of clean water (runoff) with polluted flows. Don't let pollution spread, if possible.

Minimize use of Potential Pollutants

Examine municipal use of all chemicals and other potential pollutants and identify methods of eliminating, reducing or better targeting their use in municipal operations and facilities (including alternative products). Ask yourself "Do we really need to use this chemical?"

Plan and Prepare for Spills and Accidents

Develop spill prevention and response policies and procedures for ALL facilities that use or store chemicals (and not just petroleum.) Accidents will happen, so be prepared for them.

Practice Preventive Maintenance

Regularly inspect components of stormwater collection, conveyance and treatment systems; regularly inspect machinery, pipes, storage tanks and other equipment for leaks or worn parts; regularly calibrate application equipment (salts, pesticides, fertilizers); plan for system upgrades and component replacements and repairs. Spending $1,000 to replace a worn or broken part can save $10,000 in clean up costs and fines.

Identify Potential Pollution Sources

Identify all municipal facilities and operations that could impact stormwater quality. Identify potential pollution sources at each site or for each activity. Identify, map and inspect the facility's stormwater drainage system.

Plan New Facilities to Include Stormwater Pollution Prevention

Include a stormwater pollution prevention component in all new municipal facilities and activities. New facilities should be sited to minimize waterbody impacts. Use Best Management Practices when preparing facility plans or major upgrades.

Improve Data Collection, Mapping, and Records Maintenance

Emphasize improvement of data collection and records maintenance to address higher priority pollution sources and contaminants; improvement of geographic information; and unification of data management across all relevant municipal departments and operations.

Train and Reward Employees

Train employees regarding stormwater pollution and prevention practices. Identify emergency contacts and reporting procedures. Seek employee ideas on pollution prevention methods and priorities and reward employees who participate in the prevention program. Remember, your employees are your first line of defense on pollution prevention.

Improve Communications and Coordination

Emphasize communication and coordination across key municipal departments and operations. Coordinate stormwater and pollution prevention activities with county and state agencies, organizations and institutions, as well as neighboring municipalities. Develop public outreach and citizen participation regarding municipal pollution prevention activities. The Rensselaer County Supervisors Association and Rensselaer County Highway Superintendent Association are great examples on how communications helps communities to learn from each other, share, and save money.

Municipal Operations

The municipal operations below should follow the listed procedures to minimize pollution from sediment disturbed, chemicals used, or materials stored:

- Street and Bridge Maintenance
- Winter Road Maintenance
- Sidewalks and municipally Owned or Leased Parking Lots
- Vehicle and Fleet Maintenance
- Fuel and Bulk Liquid Handling
- Parks and Open Space Maintenance
- Municipal Buildings Maintenance
- Solid Waste Management
- City Sewer Lines Maintenance, Repair, Replacement
- CSO Outfall Monitoring
- City Water Line Maintenance
- MS4 Outfall Monitoring
- Post-Construction Treatment Practices
- Streambank Stabilization

Municipal Properties

The following facilities are owned, leased, or managed by the City of Rensselaer and are within the MS4 Area:

Parks / Playgrounds
Riverfront
Plum Street
Tracy Street
Coyne Field
Lakeview
8th Street
1st Street
Walter S. Pratt
Boat Launch
Valley View
City Hall Park
2nd Street Median

Municipal Buildings
DPW Garage
City Hall
North End Firehouse
Minks Firehouse
Police Station
Library
Alarm Station
Pump Station
Salt Shed

Roadways in MS4 Area
All City Streets

Roadways Outside MS4 Area
Van Alstyne Drive

Stormwater Practices
Quackenderry Dam
School Road Wet Pond
School Road Dry Pond / Infiltration Basin

Parking Lots
City Hall (south)
City Hall (west)
City Hall (east)
Police Station lot
Broadway Firehouse lot
North End Firehouse lot
Boat launch lot

Materials Storage Yards
Aiken Avenue street sweeping yard area
Broadway salt pile
Forbes Avenue roadway materials stockpiles
7th Street former dump
Salt Shed

STREET AND BRIDGE MAINTENANCE

Street Sweeping

- The DPW currently has one street sweeper (2003 Johnston model 3600 The sweeping operations take place Mon-Friday (7 hours / day) from April to November
- Zoned coverage is utilized
  - Monday – all streets south of Partition;
  - Tuesday – all streets between Partition & McNaughton;
  - Wednesday – all streets between McNaughton & 7th Street;
  - Thursday – all streets north of 7th Street to Grandview Estates;
  - Friday – central business district for 2nd time)
- All streets are swept at least once a week
- Sweepings are dumped daily at the 20'x20' Aiken Avenue yard area. Three sides of is the area are surrounded by silt fencing and the remaining side open in the front to allow machine access. Plastic bottles and trash are removed so material can be used as landfill cover.
- Weekly sweepings are loaded into a tarped truck and taken to the Albany City landfill for use as cover and a tonnage receipt is issued and kept on file by DPW.

Street Re-Paving

- DPW performs light maintenance (pothole filling) with asphalt
- Larger re-paving projects are contracted out by the City and overseen by the DPW Commissioner. If the total disturbed area of a project is over one acre then a SWPPP is required. Projects on City Streets with less than one acre of disturbance are overseen by City of Rensselaer DPW and Planning / Engineering staff to minimize potential erosion / sedimentation or pollution through application of best management practices.

Water / Sewer Excavations

- When a waterline breaks DPW removes spoils and deposits it at Dunn's Quarry.
- When a sewer line breaks, DPW removes spoils and deposits clean spoils at Dunn's Quarry and sewage contaminated spoils are brought to Albany County Landfill to be used as cover.
- After water / sewer lines are repaired, clean fill is obtained from existing City stockpiles at Forbes Avenue (long term plan to relocate these to the Salt Shed Site) and placed directly into the excavated area to a point 2-3 feet from the surface of the hole. Crusher run is used to fill the remaining area. The excavated area is compacted/tamped and left for 2-3 weeks to settle and then blacktopped

WINTER ROAD MAINTENANCE

Street Plowing & Snow Storage

- When the DPW Commissioner determines that snow accumulation along city streets is excessive it is collected into dump trucks and brought to the south entrance of Riverfront Park where it is stockpiled adjacent to Broadway as well as the vacant lot at 2nd Avenue at Walker Street
- Snow is plowed curb to curb and stored between curb and sidewalk as feasible

Street De-Icing

- DPW applies 100% rock salt to roads to avoid sedimentation to its MS4 and CSO system
- DPW applies salt at intersections and the traffic distributes the salt down the road
- As of 1/25/11 all salt deliveries go to the new salt storage shed
- The DPW currently utilizes the following equipment:
    - Trucks - 10 total
        - 3 tandem trucks
        - 7 two-ton pickups
    - Salters
        - 3 x 6-8 ton capacity (est.) chain-driven mechanical spreaders,
        - 7 x two ton capacity chain-driven mechanical spreaders; mechanical spreaders require only ½ throttle power applied to spreaders
- Maintenance: Trucks are cleaned after each storm with power washer in DPW garage with effluent going to oil-water separator and sanitary sewer line
- Application Procedure: equipment response is according to the severity of the storm:
    - 1 inch of snow = 3 small trucks,
    - Major storm = entire fleet; In a major snow storm streets are plowed only and salt is withheld until storm is over. When de-icing begins, hills and bridges are prioritized and then crews branch to zones for distribution as needed on other city streets .36 total miles and 3 municipal lots
- Loading Procedure: A small front-end loader (½ capacity of truck spreader bins) is used to remove salt from the stockpiles and to place it into the spreader bins. Any ground spills are pushed back into the stockpile. At the end of de-icing work, trucks are driven back to salt stockpile to shovel any remaining salt back into stockpile

SIDEWALKS AND MUNICIPALLY OWNED OR LEASED PARKING LOTS

- Only sidewalks in front of Municipal Buildings (City Hall, Police Station, Library, Minks Fire House, and North End Fire House) are maintained by the city.
- Municipal building sidewalks are de-iced with GreenScapes Ice Ban (mix of sodium and magnesium chloride) stored in 50-lb bags indoors or in a covered, locked shed at all municipal buildings listed above.
- De-icing salts are distributed with a small hand-operated spreader.
- The minimum quantity of de-icing salts is applied to prevent ice formation.
- Municipally maintained parking lots at City Hall south, City Hall west, City Hall east, Police Station, Library front, Library rear, Minks Fire House lot, North End Fire House lot are de-iced using rock salt material and procedures used with city streets.
- When snow storage is exceeded at municipal parking lots, excess is taken to yard areas at Riverfront Park and 2nd Avenue and Walker Street.
- Municipal lots are swept when the zone they are located in is done (2 xs per week for City Hall and Police Station).
- Grass strips and green areas of sidewalks and parking lots are mowed during the summer and mulched in place or if in excess of 6 inches are cut and the material sent to the City of Albany Compost Facility.

VEHICLE AND FLEET MAINTENANCE

General Information

- The City has 48 vehicles in the fleet including DPW, city agencies and City Police.
- All fluid change work is performed in the DPW garage by the city mechanic

- Each vehicle is given oil changes approximately every 5,000 miles.
- Used vehicle oil is drained into mobile used oil reservoirs and transferred by pump to 750 gallon double-walled reserve storage tank and a 250 gallon main tank located in a concrete secondary containment well which fuels a used oil burning furnace. Three spill kits are located in the mechanics area as well as three others in the garage to contain small spills per the adopted spill response plan. Extra spill kit materials are also stored above the storage closet near the east door of the garage

1) *Wastewater Disposal and Treatment from Vehicle Washing*
   a) All DPW vehicles are washed in the DPW garage, which has a floor drain with silt collection chambers that runs through an oil/water separator (contractor cleans out every 6 months) before discharging to a sanitary sewer line.
   b) Fire Department vehicles are washed in the North End Fire House, which has floor drains that run through an oil/water separator (contractor cleans out every 6 months) before discharging to a sanitary sewer line.
   c) Vehicle washing should be done in areas designed to collect and hold the wash and rinse water or effluent generated. Wash water effluent should be recycled, collected, or treated prior to discharge into the sanitary sewer system.
   d) Floor drain silt is removed by vactor truck every 6 months.

2) *Site Drainage System Maintenance and Cleanout*
   a) Holding tanks shall be pumped out regularly or before they are fully filled.
   b) External drains should be examined yearly or more often to make sure that no oils, solvents or other hazardous materials get into the external drains.

3) *Recycling (including Oil and Antifreeze)*
   a) Promptly transfer used fluids to recycling drums or hazardous waste containers.

4) *Hazardous Materials Storage*
   a) All hazardous materials shall be stored inside, under cover or protective tarp, or in an appropriate bulk tank.

b) Aisle space should be wide enough to allow access for inspections and to ease material transport.
c) Materials should be stored away from high-traffic areas to reduce the likelihood of accidents that may cause spills or damage to drums, bags or containers.
d) Containers should be stacked according to manufacturer's directions to avoid damaging the container or product itself.
e) Identify all hazardous and non-hazardous substances present in a facility. Compile a list of all chemicals present in a facility and obtain a Material Safety Data Sheet (MSDS) for each one.

5) *Spill Prevention and Response (Petroleum and Other Substances)*
   a) All liquid cleaning should be performed at a centralized station to ensure that solvents and residues stay in one place
   b) Locate drip pans and draining boards to direct solvents back into solvent sink or holding tank for reuse.
   c) Promptly transfer used fluids to recycling drums or hazardous waste containers.
   d) Conduct maintenance work such as fluid changes indoors.
   e) Parked vehicles should be monitored closely for leaks, and pans placed under any leaks to collect fluids for proper disposal or recycling.
   f) Batteries are not stored.
   g) Use speedy dri and not water as possible to clean spills, leaks and drips.
   h) Rags should be used to clean up small spills, dry absorbent materials for large spills, and a mop for general cleanup. Mop water can be disposed of via the sink or toilet to the sanitary sewer.
   i) Other incidental leaks are collected in the garage floor drain which leads to an oil separator which is cleaned every 6 months by an outside contractor (Polsinello Fuels)

6) Solid Waste Disposal
   a) Solid waste should be kept in appropriate garbage bins or barrels and disposed of in appropriate facilities.

7) Alternative Product Usage
   a) Use non-hazardous cleaners when possible-Bio degradable soaps are used for vehicle washing
   b) Recycled products such as engines, oil, transmission fluid, antifreeze, and hydraulic fluid can be purchased to support the market of recycled products.

FUEL & BULK LIQUID HANDLING

Engine Oil

Engine oil is stored in 50 gallon drums inside the garage and sits inside a plastic secondary containment area with a spill catching pad under the dispenser pump.

Brake fluid

- No schedule for replacement - approximately ½ gallons used per year
- One case of new product is stored in the mechanics locked area
- Used product is added to the waste oil burner tank

Transmission fluid

- No set schedule for replacement – approximately 25 gallons changed per year
- 100 quarts of new product is stored in the mechanics locked area
- Used product is added to used oil burner tank

Diesel Fuel

- Stored within DPW garage in new 1000 gallon double-walled tank with an emergency shutoff for the dispensing pump
- Filling procedure – driver will monitor fuel link at all times;
- 2 catch basins in street just outside garage door will be covered to prevent any spill from potentially entering stormwater system;
- A spill pad will be located on the floor underneath the tank filling area
- Physical barriers prevent any vehicles from backing into tank
- Spill kit materials are stored right on the tank

PARKS AND OPEN SPACE MAINTENANCE

General Information

- All grassed areas are mowed with mulching mowers.
- All vegetative cuttings are taken to City of Albany DGS Compost Facility.
- Brush on city vacant lots is cut twice a year, raked into dump trucks and taken to City of Albany DGS Compost Facility.
- Trash containers in parks are open-topped 50-gallon barrels collected weekly or when full per inspection.
- Four Porta-johns are located in city parks and maintained by Blue Diamond
- The splash pad at Pratt Memorial Park is winterized with marine anti-freeze, which is stored on site in 50-gallon drums in a locked shed; when pool is opened the lines are flushed to the sanitary sewer system; pool is operated using city drinking water and drained to the sanitary lines.

1) Pesticides & Herbicides

a) No pesticides or herbicides are used by the City of Rensselaer DPW staff nor are these services contracted for municipal property.

2) Fertilizer Use, Alternatives and Reductions

a) Fertilizers are not used in general City grounds / lawn maintenance and if need arises for use shall only be applied following instructions given on the package, and at rates prescribed to ameliorate soil fertility.
b) Alternatives to chemical fertilizers such as manure, mulches and compost should be used where possible to improve soil fertility. The City of Rensselaer mulches its lawn clippings.

3) Erosion Control Practices

a) In areas where grass is worn due to foot traffic, alternatives to grass such as mulch, gravel or a paved path should be used to prevent soil erosion where grass is lacking.
b) In areas of new lawn seeding, hay mulch should be used to maintain moisture and prevent erosion until the new grass is growing.

4) *Solid Waste: Waste Reduction, recycling and litter control*

a) Trash containers in parks are open-topped 50-gallon barrels collected weekly or when full per inspection
b) In areas where dumping is an issue, signs will be placed reminding the public of fines for dumping and littering.

5) Hazardous Materials Storage

a) All hazardous materials shall be stored inside, under cover or protective tarp, or in an appropriate bulk tank.

b) Aisle space should be wide enough to allow access for inspections and to ease material transport.
c) Materials should be stored away from high-traffic areas to reduce the likelihood of accidents that may cause spills or damage to drums, bags or containers.
d) Containers should be stacked according to manufacturer's directions to avoid damaging the container or product itself.

6) Pesticide and Fertilizer Usage Records

a) Records shall be maintained on pesticide and fertilizer purchases and usage, including dates of usage, rates of application, areas of application and weather.

7) Training

a) All employees that provide grounds maintenance shall receive yearly training on clean-up techniques, proper materials storage, chemicals usage, and safety.
b) All training will be documented.

MUNICIPAL BUILDING MAINTENANCE

City Hall

- Cleaning supplies (see MSDSs; bleach, ammonia, window cleaner, floor wax….) are kept in slop sink closet with mop; Sink drains to sanitary line.
- There are no floor drains in City Hall.
- Sump pump drains to the sanitary line.
- 5 gallons of gasoline and 1 gallon of oil in plastic containers are stored in outside locked and vented shed.

Salt Shed

- The only activities that occur at the salt storage facility are storing, loading and unloading of road salt (100% rock salt).
- All salt is stored inside the shed. There is no stockpiling of salt or any other materials elsewhere on the property.
- The finished floor elevation of the salt shed is 22 feet, one foot above the 100 year flood elevation. Because salt is stored within the building at all times, salt is prevented from discharged into the Mill Creek during a flood event.
- Road salt delivery vehicles back into the building and deposit salt directly onto the inside salt piles. Salt is never deposited outside the shed.
- All salt loading is contained within the salt shed. A small front-end loader (½ capacity of truck spreader bins) is kept in the shed. Salt trucks back into the salt shed and a small front-end loader is used to fill the spreader bins. All filling is done inside the shed in order to contain the salt, and the front-end loader remains in the shed at all times. Any spills that occur outside the building are immediately swept or scooped back into the stockpiles.
- The asphalt drive in front of the salt shed is regularly inspected and salt tracked out of the shed is swept back into the shed when necessary.
- At the end of de-icing work, salt trucks are driven back to the salt shed and any remaining salt is dumped back into the stockpiles.
- Loading Procedure: A small front-end loader (½ capacity of truck spreader bins) is used to remove salt from the stockpiles and to place it into the spreader bins. Any ground spills are pushed back into the stockpile. At the end of de-icing work, trucks are driven back to salt stockpile to shovel any remaining salt back into stockpile
- A schedule for sweeping salt that may be tracked or spilled outside of the salt shed back into the shed. Any spill shall be immediately swept after each truck exits the shed. A visual inspection should be done to see if sweeping is necessary.
- There will be no outside stockpiling or storage of salt or other materials on the side of the building

- The top of a retaining wall between the salt shed and the adjacent creek is higher than the paved area around the salt shed and will prevent water from washing over the wall and potentially into the creek.

DPW Garage, Police Station, and Fire Stations

1) Petroleum Bulk Storage Spill Prevention and Response

a) A spill kit should be maintained near bulk storage and filling areas to clean up minor spills.

b) DEC's Spill Hotline phone number is (800) 457-7362. Many spills must be reported within 2 hours of the incident. This phone number should be kept with the spill kit and near the tanks.

i) City of Rensselaer has a diesel tank located inside. All vehicles are fueled at a local gas station.

2) Hazardous Material Storage (including Pesticides)

a) All hazardous materials shall be stored inside, under cover or protective tarp, or in an appropriate bulk tank Aisle space should be wide enough to allow access for inspections and to ease material transport.

b) Materials should be stored away from high-traffic areas to reduce the likelihood of accidents that may cause spills or damage to drums, bags or containers.

c) Containers should be stacked according to manufacturer's directions to avoid damaging the container or product itself.

3) Building Site Drainage, Roof Drainage System, Infiltration

a) If possible, building site drainage should flow into grassed swales and stormwater detention facilities. The grassed swales should be mowed regularly. Stormwater detention facilities should be regularly cleaned out of trash, debris and sediment.

b) Trash, leaves, sand and gravel should be cleared out of drainage systems. Roof drains should also be cleared of leaves and other debris.

SOLID WASTE MANAGEMENT

General

- Glass / metal / plastic & newspaper / cardboard are recycled with curbside trash pickup.
- Trash and recycling pickups occur by Zone coverage :
    - Monday – all streets south of Partition;
    - Tuesday – all streets between Partition & McNaughton;
    - Wednesday – all streets between McNaughton & 7th Street;
    - Thursday – all streets north of 7th Street to Grandview Estates;
    - Friday – central business district for 2nd time)
- Each dwelling unit is allowed 2 bulk pickups per year (appx. 8'x4'x4') with additional fees for excess material, propane tanks, and tires.
- Trash is driven in the covered garbage truck to the Albany City Landfill.
- Recyclables are trucked in a covered vehicle to Albany Recycling Plant.
- Rensselaer does NOT ACCEPT:
    - auto parts – including batteries;
    - construction / demolition / remodeling material;
    - concrete & bricks;
    - liquid paint, chemicals (household or pool);
    - medical waste – including hypodermic needles;
    - hazardous waste – including oil & gas
- Solid waste crews are trained to spot illicit materials and if an item is noted the material is not picked up and a written notices is left at the property and the Building & Zoning Administrator and Stormwater Officer are notified to follow up with the property owner.
- If illicit materials are picked up by mistake and a leak from the truck occurs, the crew cleans any leaks with speed-dri.
- Yard waste is collected curbside in biodegradable paper bags (no plastic) and brought to City of Albany DGS Compost Facility.
- City will be exploring policy to require homeowners' trash cans to be drilled at the bottom to prevent accumulation of stormwater in garbage truck and minimize spilling of nutrient-laden water on City streets.

1) Prevention of Illicit Dumping

a) Illicit dumping on City highways is made illegal in the Illicit Discharge Detection and Elimination Law.

b) Those found dumping, as well as those who are identified by their waste, will be fined and their names may be posted in the newspaper or other public place.

c) Sites with continual dumping may have signs installed informing the public of the illegal nature of dumping. Articles in the newspaper and town's newsletter will also inform readers of the illegality and negative consequences of dumping.

2) Litter Control

a) Trash must be bagged and placed in a 32 gallon container.
b) Littering on City highways and lands is made illegal in the Illicit Discharge Detection and Elimination Law.
c) Those found littering may be fined or remanded to community service. Those found littering may also have their names posted in the newspaper or other public place.
d) Sites with continual littering may have signs installed informing the public of the illegal nature of littering or of the implications of littering.
e) Municipal waste bins or barrels at parks and other locations should be emptied weekly or more often when full to keep trash in its place.

3) Waste Reduction and Recycling

a) All recyclable material must be in containers marked recyclables.
b) Card board boxed must be flattened.
c) All paper items should be placed in paper bags.
d) Leaves and grass clippings must be in paper biodegradable bags.

4) *Hazardous Waste Collection from Municipal Buildings*

a) Municipally generated hazardous waste will be disposed of in a legal, appropriate fashion.
b) Hazardous waste will be properly stored inside where the waste will be labeled properly.
c) Hazardous waste will be removed by a hauler licensed to haul hazardous substances to a facility that is licensed to either recycle or dispose of hazardous waste substances.

5) Training

a) All solid waste (DPW) employees shall receive yearly safety and stormwater pollution prevention training.
b) All training will be documented.

CITY SEWER LINES MAINTENANCE, REPAIR, REPLACEMENT

Regular Inspection & Maintenance

- Sewer manholes are inspected by a zoned schedule (identical to garbage route) during the summer to perform cleaning and root cutting so that each zone is done once per year.
- If problems identified during routine inspection are not corrected by routine maintenance then lines are camera'd with the help of the Town of East Greenbush to identify problem

Water / Sewer Excavations

- City crews will dig and repair lines up to 10 feet deep .Work deeper than that is carried out by a contracted firm.
- When a waterline breaks the DPW removes the spoils and deposits it at Dunn's Quarry.
- When a sewer line breaks, DPW removes the spoils and deposits clean spoils at Dunn's Quarry and sewage contaminated spoils are brought to Albany County Landfill to be used as cover.
- After water / sewer lines are repaired, clean fill is obtained from the existing City stockpiles at Forbes Avenue (long term plan to relocate these to the Salt Shed Site) and placed directly into the excavated area to a point 2-3 feet from the surface of the hole. Crusher run is used to fill the remaining area. The excavated area is compacted/tamped and left for 2-3 weeks to settle and then blacktopped.

CSO OUTFALL MONITORING

- Every 5th of the month the DPW (James Thomas) performs inspections of CSOs (Belmore Place, 2nd Avenue, Columbia Turnpike, Partition Street, Fowler Avenue, Tracy Street, Central Avenue 1, Central Avenue 2) for County SPDES inspections visual inspection (scanned form attached).
- If any running water that is not clear groundwater is observed, a catch sample is obtained and sent to Bennett Labs to confirm if it is sewer water. The Rensselaer County Sewer District and DEC (Derek Thorsland) are notified of the potential discharge.
- If discharge is at an overflow gate then the gate is cleaned and if overflow is not corrected then the line is inspected by City staff. Rensselaer County responds to any alert by sending an inspection team to check their county gate and line inlet.
- Every 5th of the month DPW (James Thomas) does inspection of CSOs (Farley Drive and Broadway)
- Every 5th of the month the DPW (James Thomas) performs an inspection of the wet pond with forebay at the High School Road, 2 dry ponds at high school road, and dry pond at South Street culvert at rail tracks.

CITY WATER LINE MAINTENANCE – WATER DEPARTMENT, DPW

Regular Inspection & Maintenance

- Water department crews perform scheduled annual leak detection with an outside agency and employ equipment for detecting leaks at hydrants or shutoff valves.

Water / Sewer Digs

- When a waterline breaks the DPW removes the spoils and deposits it at Dunn's Quarry.
- When a sewer line breaks, DPW removes the spoils and deposits clean spoils at Dunn's Quarry and sewage contaminated spoils are brought to Albany County Landfill to be used as cover.
- After water / sewer lines are repaired, clean fill is obtained from existing City stockpiles at Forbes Avenue (long term plan to relocate these to the Salt Shed Site) and placed directly into the excavated area to a point 2-3 feet from the surface of the hole. Crusher run is used to fill the remaining area. The excavated area is compacted/tamped and left for 2-3 weeks to settle and then blacktopped

STORMWATER DRAINAGE, CONVEYANCE MAINTENANCE AND TREATMENT SYSTEM

1) Inspection Priorities

a) Infrastructure whose storm sewersheds relate to the categories listed below is first priority for cleaning and maintenance.
   i) Hudson River (303(d) water body)
   ii) Designated MS4 geographic priority areas.

b) Infrastructures whose storm sewersheds drain to CSOs or wetlands are second priority.

c) Infrastructures whose drainage systems that flow into water bodies not listed above are third priority.

2) Inspection of System Components, and Record-Keeping and Frequency Tracking

a) Records should be kept of all inspections of stormwater drainage facilities.

b) A log should be kept of the drainage system inspected, receiving waters, priority of the drainage system, when inspections are made, and the time past between the last inspection of the facility.

c) All first priority drainage systems should be inspected at least once a year.

d) All second priority drainage systems should be inspected at least once every eighteen (18) months.

e) All third priority drainage systems should be inspected at least every two years.

f) Drainage systems that appear to require cleanout or maintenance more frequently than expected should be inspected yearly, if not more frequently for first priority drainage systems.

3) Technology Improvements and Installation

a) In areas where pollution or siltation is shown to be a problem, technological improvements and retrofits should be installed. Tracing problems to their origins and requiring remediation should be used according to the City's Illicit Discharge Detection and Elimination Law.

4) Maintenance, Repair and Cleanout of System Components

a) At the time of inspection, notation on whether a system required cleanout, regular maintenance or repair should be made. If the system is clogged, filled, eroded or similarly impaired to the point of ineffectiveness or hazard, a notation should be made to have the system cleaned/repaired immediately.

b) Needed cleanout, maintenance or repair should be placed on the DPW department work list. Impaired and hazardous systems should have a high priority.

c) Siltation should be removed from wet pond forebays, and ditches when they are fifty percent (50%) filled. Culverts should be cleaned before siltation creates flooding problems.
d) Enclosed drains should be cleaned regularly by either flushing or vacuuming.
e) Trash should be regularly collected from grates or grilles.

5) Public Education and Communications

a) The public is key to helping maintain storm drainage systems. Maintaining open communication with the public will help in identifying problem systems as well as reducing costs of cleanup by promoting citizen responsibility.
b) Educational articles will be included on the City's website, and in The Advertiser thru the Rensselaer County's MS4 Communities, etc. on the impacts on littering on the storm drainage system, the importance of keeping the ditches clear for drainage, contact phone numbers for spotted problems, …
c) Pamphlets on stormwater will be available at the City Planning Office, City Clerk's Office and on the City Website

6) Maintenance of Open Drainage Ditches

a) Open drainage ditches will be inspected on the same basis as closed systems.
b) Ditches will be cleaned out or reshaped when the ditch is silted in to half its depth, flooding regularly occurs on the road, or additional drainage is needed to maintain the roadway.
c) Freshly shaped ditches will be seeded. Ditches with a slope greater than ten percent (10%) should have rip-rap or geotexiles installed to prevent erosion and scouring of the ditch.
d) Vegetation in the ditches should be mowed regularly.

7) Training

a) Highway and Building Department Employees should be trained on aspects of inspection of drainage systems for maintenance and repair needs on a yearly basis.
b) All training will be documented.

MUNICIPAL POOL MAINTENANCE

1) Hazardous Materials Storage

a) All hazardous materials shall be stored inside, under cover or protective tarp, or in an appropriate bulk tank.

2) Alternative Discharge Options for Chlorinated Water

a) Chlorinated pool water will not be discharged into the stormwater sewer system.
b) Chlorinated pool water will be dechlorinated before release into the sanitary sewer system or the environment. Pool water will sit at least 2 days after the addition of Sodium Thiosulfate or a similar product before or until the chlorine or bromine levels are below 0.1 mg/l.
c) Natural dechlorination is encouraged where feasible by allowing the sun to shine on the pool water for a minimum of 4 days to break down the chlorine.
d) Fully dechlorinated pool water may be drained into the stormwater system, but to reduce volume contributions it is preferable to drain onto lawn areas or into the sanitary system.

3) Training

a) Pool workers shall be trained in the use of pool chemicals, pool water testing, proper materials storage, clean-up techniques and safety.

ANIMAL WASTE MANAGEMENT

1) Pet Waste Control, Education and Enforcement

a) Pet owners are required to pick up pet wastes from parks, streets and sidewalks.
b) Signs in parks will remind pet owners of this requirement.
c) Provision of pooper bags (recycled shopping bags) and trash cans in parks will assist pet owners in the removal of pet wastes.

2) Bird Waste Control

a) DEC and US Fish and Wildlife Office will be contacted when wild birds amass and congregate regularly in areas.
b) Sidewalks and streets that have accumulated bird droppings will be swept by machine or broom.

3) Domestic Animals

a) Domestic animal wastes will be swept up from paved areas such as sidewalks and parking lots.
b) Domestic animal wastes will be stored in an appropriate area in an appropriately constructed manure pit or pile.
c) Odor control may be necessary for the manure pile or pit.

4) Wildlife

a) To prevent waste from wildlife from contaminating stormwater, wildlife shall be discouraged from massing or straying onto public property, especially on public waterfronts or parks. This may be accomplished through non-lethal methods such as use of cannons and dogs, as well as lethal methods.

5) Public Education and Communication

a) Educational materials such as signs, pamphlets and handouts, as well as communications through newsletters, newspaper articles and billboard ads will be used to communicate the importance of cleaning up after pets.
b) Newspaper articles and other media communications will be used for informing the public of methods to be used for wildlife removal.

6) Training

a) Grounds maintenance personnel will be trained on procedures dealing with informing visitors on pet waste removal. They will also be provided the phone numbers for DEC Wildlife Officers.

INSPECTION / MAINTENANCE OF POST-CONSTRUCTION STORMWATER PRACTICES

- Annual inspection of post-construction stormwater management practices will be performed.
- DPW will maintain all of the City's stormwater management practices.

- Privately owned stormwater management practices will be inventoried, inspected and notification to the owner if not maintained. The owner will have 2 weeks to comply or they will be in violation of the City's Illicit Discharge Law.

STREAMBANK STABILIZATION AND HYDROLOGIC HABITAT MODIFICATION

1) Priority Setting for Streambank Stabilization Projects

a) Permit authorization for work on or in streams will be obtained prior to initiation of work (NYS DEC has jurisdiction with tidal Creeks and Army Corps of Engineers has jurisdiction on upstream portions of the Quackenderry and Mill Creeks as navigable water tributaries).
b) First priority for streambank stabilization projects will be for areas where life or property, including roadways, is at risk from erosion or flooding from siltation.
c) Second priority for streambank stabilization is where important habitats or other ecological importance is threatened due to erosion or siltation.
d) Third priority for streambank stabilization is where siltation threatens hydro facilities or threatens dam workings.
e) Fourth priority for streambank stabilization is any need not listed above.

2) Opportunities for Alternative, Soft-Engineering Approaches for Erosion Control

a) When possible, use of soft-engineered approaches for erosion control should be used, such as plantings of osiers, use of geotechnical materials and other proven methods to stabilize stream and water body banks.

3) Priority Setting for Sediment Removal and Pond Maintenance

a) Sediments must be removed from stormwater treatment practice detention pond forebays when the forebays are half full.
b) Sediment should be removed on a scheduled basis, preferably before it becomes necessary under item a.

4) Opportunities for Hydrologic Habitat Improvements

a) Naturally occurring and man-made lakes and ponds that have a significant sedimentation problem should be investigated as to whether a sedimentation forebay should be constructed at stormwater outfalls or major stream inlets that are growing deltas.
b) Careful removal of sedimentation from wetlands that are becoming silted in should be investigated.

5) Application of Fluvial Geomorphic Assessments in Erosion Control Projects

a) Natural flooding and flood plains should be taken into account in erosion control projects.
b) Erosion control projects should not increase flooding upstream.

6) Opportunities for Community Sponsored Volunteer Stream Walks

a) Volunteer stream walks and adoption of streams and other water bodies will be encouraged as a method of improving community awareness and monitor / improve water quality.
b) Use of required stream clean up as part of alternative sentencing for littering or other improper disposal method should be considered.

7) Training

a) When available, the appropriate personnel should take advantage of training in maintenance of stormwater retention facilities, hydrological habitat maintenance and other water feature training.
b) Manuals (O&M Manuals) of stormwater retention facilities should be kept in a location where the appropriate personnel can find and use them.

Goals:

1) Pet Waste Program at River Front Park completed by April 2013
2) Storm Drain Markers inside curb completed by December 2012
3) Storm Manhole Covers Stamped with Drains to completed by 2017
4) Residential Trash required to be in covered Garbage Cans completed by April 2012
5) Hazard Waste Days completed by April 2013
6) All outfalls located and mapped completed by April 2014
7) Hotline number on printed education Material completed by April 2012
8) Catch basins cleaned yearly completed by April 2012
9) All Parks to have covered trash cans completed by April 2013
10) At DPW Garage cover catch basins next to creek during oil deliveries completed by April 2012
11) Post No Dumping signs at Quackenderry, Port Area, Railroad and Fort Outfalls divided into 5 sections. One section inspected every 5th of the Month until all sections are inspected completed by December 2011.
12) Outfall dry weather testing performed yearly completed October 2012.
13) A file for each municipal facility will be kept. Each file will contact self-audits, floor plans, inspections, and documentation of spills completed by December 2012.
14) Semi-annual training on spills and stormwater issues of all DPW staff completed by 2012.
15) All reports of stormwater, spill or discharge issues will be investigated by the City within 24 hours. A report will be filled out stating date and time of notification and of response, outcome of investigation. On a yearly basis, actual response time and policy response time will be evaluated completed by December 2012.
16) City Hall to obtain a spill kit completed by December 2011.
17) Eliminate salt storage area on Broadway by June 2011.

The City of Rensselaer will follow procedures to promote pollution prevention and good housekeeping practices.

The pollution of concern for the City of Rensselaer is silt and sediment. In order to reduce silt and sediment the City will continue to sweep streets and sidewalks from May to October. The silt, sediment and any task that can be measured will be recorded to evaluate the effectiveness of the stormwater management program. Sediment and debris will be removed from catch basins on a yearly basis and recorded.

To reduce silt and sediment on the roadways, trucks are covered at all times with a tarp when hauling soil materials. Any excess soil materials are stored at City Facility and seeded.

The City will inspect the post construction stormwater management facilities to ensure compliance of the O&M schedules and good housekeeping procedures are being performed. Operators will be notified of any unsatisfactory reports and given a specific time frame to comply. If the operator does not comply, enforcement will be in accordance of the local law.

Besides pollution prevention of silt and sediment, the Department of Public Works has good housekeeping procedures in place to reduce other pollutants. The Department of Public Works (DPW) performs all vehicle repairs inside their garage which is equipped with an oil separator and a sand trap. All vehicles are washed inside the wash bay equipped with an oil separator. The City of Rensselaer practices normal oil handling policies for disposing of used oil. Vehicles are scheduled as needed by miles or by number of engine hours for maintenance to prevent vehicles from leaking fluids due to poor maintenance.

All salt and sand is stored inside at the City Salt facility which has an impermeable floor. Sanders are loaded inside the salt facility and the area surrounding the facility is swept clean as necessary. The City of Rensselaer will continue to use Magic Ice-B-Gon, salt agent, to reduce the amount of salt and sand applied to the roadways. The amount of salt and sand mix used is dependant upon the storm and expected weather conditions. The City of Rensselaer will continue the practice of turning off the sander while at stop lights and not let sand/salt to pile up.

The City of Rensselaer will continue the practice of limiting the use of lawn care products by applying once a year by qualified DPW personnel or a qualified landscape contractor. Fertilizer/pesticide storage, management and usage are by personnel licensed and trained to handle these potential pollutants. This is typical for the City of Rensselaer in that potential pollutants are handled by legally capable personnel and City wide emphasis for environmental compliance.

Fertilizing all the sports fields are contracted out to a qualified contractor.

The City has in place a solid waste pickup schedule. DPW employees are advised how to handle noxious materials. The City will continue with its recycling program and hazardous waste clean up days provide through the Town of Colonie.

Solid waste management program includes collection truck door gaskets to be tight and sealed; drain plug must be in place on collection truck and clean up all loose debris during collection

The City of Rensselaer will continue to televise the storm sewers annually to identify and remove illegal connections. Sewers found in poor condition are repaired and/or replaced.

The City Personnel receives yearly training through DEC conferences, seminars and other facilities

Self-audits will be performed during the 2011-2012 reporting year. Goals will be established based on the self-audit results.

VIII. OUTFALL AND SMALL MS4 MAPS

The City of Rensselaer's outfalls have been mapped and are included in **Appendix G**. Also included is the watershed map of Albany County MS4s, the Storm Sewer System General Plan and the General Plan Maintenance Program. This includes all the catch basins and storm sewer sizing. The General Plan Maintenance Program shows which sections of the storm sewer has been cleaned and when as well as sections that have been repaired and when.

IX. STORMWATER MANAGEMENT PRACTICE SELECTION AND MEASURABLE GOALS

The City of Rensselaer does not have a stormwater management practice selection requirement. The City allows the Design Engineer to select the stormwater management practice as long as it meets the New York State Stormwater Design Manual.

X. OPERATION AND MAINTENANCE SCHEDULES

The operator must submit an Operation and Maintenance Schedule and Manual prior to receiving a certificate of occupancy. The Operation and Maintenance Manuals are retained at the Engineer's Office (Laberge Group) and at the City Hall. Operation and Maintenance Manuals must contain as builts of the stormwater management area and control

structure. The City of Rensselaer has a summary of the Operation Maintenance Schedule

XI. DOCUMENTATION OF PUBLIC OUTREACH EFFORTS AND PUBLIC COMMENTS

The City of Rensselaer publishes the public meeting announcement in the local newspaper two (2) weeks prior to the public meeting on the annual MS4 Stormwater Management Report. The MS4 Stormwater Management Report is also available on the City website. The public is encouraged to attend the annual public meeting to comment on the annual report.

XII. SUBMITTED CONSTRUCTION SITE SWPPPS

The construction site SWPPPS that are submitted for review are retained at the City Engineer's Office (Laberge Group) and at the City Hall by specific project.

XIII. REVIEW LETTERS

Review letters are retained at the City Engineers Office (Laberge Group) and at the City Hall.

XIV. CONSTRUCTION SITE INSPECTION REPORTS

The City of Rensselaer has a binder for each project site in which construction site inspection reports are kept. The City Engineer (Laberge Group) also has the weekly inspection reports on their computer system. Include in **Appendix L** are blank Pre-Construction Reports, and Weekly Construction Reports.

XV. NOTICE OF INTENT

The Notice of Intent for Coverage under an SPDES General Permit for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems is location in **Appendix M.**

XVI. ANNUAL REPORTS

The Annual Reports are located in **Appendix N.**

XVII. SPDES PERMIT

The Municipal Separate Storm Sewer Systems (MS4s) permit is located in the SPDES Binder and the Construction Activity Permit is located in SPDES Binder located at the City Hall.