

Public Education and Outreach

BMP 1 - Produce and distribute pamphlets on methods to reduce pollution to stormwater

Brochures have been modified to address bacteriological (E.Coli) and sediment loadings on the environment.

Previous pamphlets have been produced and have been distributed widely through availability in city offices, mailings and distribution to interested people and organizations.

Schedule and Evaluation

Hundreds of pamphlets have been distributed. New pamphlets completed in June 2009.

Responsible Party: Mike Stevens, Communications Director

Necessary Documents: Pamphlets

Measurable Goals: The City goal with these pamphlets was public education and saturation of the public. Any increase in knowledge regarding pollution prevention is considered a good goal considering the benefit cost per pamphlet versus preventing one incident of pollution, (i.e. citizen does not put motor oil down storm drain). The city feels the pamphlets need to be revised to reflect BMPs for bacterial and sediment loading of the Roanoke River. The City will mail out a minimum of 500 brochures per year as well as make them available to the public in the City Manager's office and Engineering Department. In addition, pamphlets will be made available on the City's website.

Items to be Reported in the Annual Report: Summary & numbers printed and distributed (if warranted);

New brochure completion June 2009

Distribution July 2009

BMP 2 – Post Registration Statement on City Website

Schedule: Immediately following approval of City permit

Responsible Party: Mike Stevens, Communications Director

Measurable Goals: Record number of "hits" to the web link

BMP 3 - Produce Video PSA

Produce and air video public service announcement concerning the prevention of pollution of stormwater.

Schedule and Evaluation

Dozens of broadcasts on the City Information channel 18

Responsible Party: Mike Stevens, Communications Director

Necessary Documents: DVDs

Measurable Goals: The City goals in regards to using channel 18 as an educational tool were threefold;

(DCR 199-148) (07/08)

1. Obtain and broadcast numerous and free videos detailing stormwater pollution prevention. Examples include, "After the Storm"- EPA, "Watershed Connections" – DCR,
2. Create a VPSA tailored to the citizens of Salem, answering their questions and involving citizens in production.
3. Involve the young people. The Mayor Youth Council (selected Salem High School students interested in the workings of local government) participated with the Planning Department to produce this video in 2006. Broadcast has occurred in the later half of 2006 and continues.

Items to be Reported in the Annual Report: DVD & numbers of broadcasts (if warranted);

BMP 4 – Creation of an Education and Curriculum Plan for City Schools

Create and submit to City schools a template curriculum plan that incorporates BMP's that help in the prevention of pollution of stormwater.

Schedule and Evaluation

Submittal of finished template curriculum

Responsible Parties: Communications Director, Planning/Economic Development Director and School Superintendent

Necessary Documents: Curriculum Plan submitted to the schools in 2003

Measurable Goals: The City goal is to provide teachers and faculty a template and resource to use when instructing students K through 12 in the public school system in particular regards to the Standard of Learning (SOL) Guidelines. Many teachers currently teach topics in the area of the life and physical sciences with respect to protecting the environment. The maximum amount of flexibility is given to any teacher and usage of the plan is voluntary.

Items to be Reported in the Annual Report: Curriculum plan (if warranted);

Modifications: Revisions to curriculum plan to reflect emphasis and bacteriological and sediment loading on the Roanoke River June 2010.

Public Involvement/Participation

Permit Requirements: Public involvement/participation. At a minimum, comply with applicable state, tribal, and local public notice requirements when implementing the stormwater management program

BMP 5—Establish Citizen Advisory Committee

The City of Salem NPDES Citizen Advisory Committee is made up of members of the City Planning Commission, who serve staggered 2 year terms. The members training and knowledge with planning are a major resource to city staff and the NPDES program.

Schedule and Evaluation

Salem proposes to continue to implement this BMP without change. The City can bring items to either the daytime work session or evening public hearings. In 2007, the Advisory Committee evaluated the draft Stormwater and Illicit Discharge ordinances prior to submission to City Council.

Responsible Parties:

Public Information Officer and Planning/Economic Development Director is responsible for facilitating the meeting.

Necessary Documents: Draft Annual Report and Proposed Schedule are needed for the meeting; Meeting Minutes are needed for the annual report.

Measurable Goal: The City will hold one annual meeting to provide information regarding the program to the Citizen Advisory Committee of Salem.

Items to be Reported in the Annual Report: Date of Meeting; Meeting Minutes.

BMP 6—Citizen Survey

Survey and determine knowledge of causes and behaviors that contribute to stormwater pollution

Schedule and Evaluation

March 2004 – Conducted Survey

March – April 2009, New Survey

Responsible Parties: Communications Director and Planning/Economic Development Director.

Necessary Documents: Survey results.

Measurable Goal: Determine whether there was a net gain on knowledge specific to stormwater pollution prevention and causes. Conduct surveys on a 5 year cycle to coincide with the beginning and end of a MS4 5 year permit.

Items to be Reported in the Annual Report: Survey results.

Modifications per Required Admin Update: Survey will be modified to emphasize bacteriological and sediment BMP information.

Illicit Discharge Detection and Elimination

BMP 7—Implementation of an Illicit Discharge Ordinance

The City of Salem established an illicit discharge ordinance sub-committee to work on an ordinance that provided for general provisions, definitions, inspections & monitoring and penalties discharges to the city's MS4. This sub-committee worked with the Citizens Advisory, City Management and City staff prior to submission to City Council for approval. Final approval by City Council was in late November 2007 and will become effective early December 2007.

Schedule and Evaluation

Implemented December 7, 2007. Numerous actions listed by enforcement officer.

Responsible Parties: The Program will be administered by the Engineering department. The enforcement will be handled by the Building Inspection, Fire and Police departments.

Necessary Documents: Illicit Discharge Ordinance.

Items to be Reported in the Annual Report: Number of enforcement actions and violations.

Modifications per Required BMP Admin Update: Modification to the Illicit Discharge Ordinance as necessary will be noted in Annual Reports.

BMP 7 A – Detection program for Illicit discharge – Enforcement Officer/Inspector

Schedule and Evaluation

Full-time inspection/enforcement office has been active prior to MS4 permit. It now has additional enforcement options under the Illicit Discharge Ordinance.

Responsible Parties: Captain Brian Thurman, City of Salem Fire Department

Necessary Documents: Illicit Discharge Ordinance and associated enforcement documentation.

Measurable Goal: Full-time professional position within the City to handle and coordinate enforcement of the City's Illicit Discharge ordinance and other related state environmental laws.

Items to be reported in Annual Report: Enforcement incidents and documentation

BMP 8—Detection program for Illicit discharge – Cross and illegal connection detection

The City will begin in March 2008 a program to locate any cross connections to the MS4. City staff will rely on a utility line camera and field observations to locate the illegal connects in cooperation with the City water and sewer department staff currently smoke testing the sanitary sewer system. The City is performing over \$8,000,000 on sanitary sewer rehabilitation. The rehabilitation will significantly reduce I/I and sewer overflow issues as well as leakage of sanitary sewers into the MS4.

Schedule and Evaluation

This BMP is implemented at the time of plan review during all years of this permit. Completion of Phase I and II of Sanitary Sewer Rehab in 2012.

Responsible Parties: Administration of the program is by the Engineering Department, field work by the Street and General Maintenance Department and hardware and personnel assistance from the Water and Sewer Department.

Necessary Documents: Progress Map and record documents.

Measurable Goal: Completion of the entire City and continuing to check areas of concern.

Items to be Reported in the Annual Report: Location and correction of any cross-connections.

BMP 9—MS4 Mapping

The City instituted a plan to use GPS/GIS to map the City's MS4.

Copies of all staff certifications for the ESC program are available upon request.

Schedule and Evaluation

The City used current hardware and software to map the storm drainage structures within the City. Summer intern as well as permanent staff assisted in this project. 100% of known MS4 structures have been mapped within the corporate limits. Currently the City is on the second sweep of the MS4 looking for any missing structures not located before and adding additional MS4 infrastructure to the mapping. In addition, conditions of re-mapped outfalls and possible cross-contamination shall be reported to the City's Environmental officer.

Responsible Parties: Engineering Department

Necessary Documents: MS4 Map

Measurable Goal: A current MS4 Map – site reconnaissance

Items to be Reported in the Annual Report: MS4 Map and any additional supporting documentation.

Construction Site Runoff Control

BMP 10—Maintain VDCR Accredited Erosion and Sediment Control Program

The City of Salem relies on its erosion and sediment control program as regulated under the Virginia Erosion and Sediment Control Law (ESCL) and attendant regulations. Although the City is not regulated under the Chesapeake Bay Preservation Act, the ESCL requires Salem to be more protective of water quality. The ESCL requires plan review, inspection and enforcement down to projects disturbing areas greater than 10,000 square feet. However, the City has reduced this number to greater than 5,000 square feet. Plan review, inspection, enforcement requirements of this program are specified under this law. Additionally, the City has adopted the Virginia Erosion and Sediment Control Handbook, Third Edition as the standards and specifications for erosion and sediment control. Updates to the ordinance and the handbook are completed as soon as possible once the City becomes aware of the changes.

Schedule and Evaluation

The City will implement the program according to the schedules listed above during all years of this permit. The City relies on the Department of Conservation and Recreation's Local Program review to determine the consistency and compliance with the VA ESC Law and attendant regulations. If the City fails to be found consistent, the City will work with DCR to develop a Corrective Action Agreement (CAA) suitable to both the City and DCR. The City will implement the CAA in accordance to the schedule included in the agreement.

Responsible Parties: The ESC program is administered through the Engineering Department

Necessary Documents: Land Disturbance Permit Application, Plan Review Checklist, Site Inspection Checklist

Items to be Reported in the Annual Report: Number of Plans Approved, Total Number of Disturbed Acres

Modifications per Required BMP Admin Update: The City currently sends VDCR monthly reports listing land disturbing permits issued and acreages as required under Virginia's MS4 general permit.

BMP 11—Small Construction Permit

The City requires that all land disturbing projects 1 acre or greater obtain a VDCR General Permit for discharge of stormwater from construction activities included in the E&S plans. A land disturbing permit will not be issued until a copy of the small construction permit application and payment or a DCR letter of permit coverage is submitted to the City. The City reserves the right to review and approve the Storm Water Pollution Prevention Plan (SWPPP) prior to granting a land disturbing permit.

Schedule and Evaluation

This BMP will be implemented March 2009.

Responsible Parties: Engineering Department.

Necessary Documents: E&S and SWPPP plans.

Items to be Reported in the Annual Report: Number of Plans Approved, Total Number of Disturbed Acres

Modifications per Required BMP Admin Update: TBD

Post-Construction Runoff Control

BMP 12—Implementation of Stormwater Management Ordinance

The City of Salem established a stormwater management sub-committee to work on an ordinance that provided for general provisions, procedures, requirements, definitions, inspections & maintenance, repair, enforcement and penalties in regards to stormwater management for the city's MS4. This sub-committee worked with the Citizens Advisory Committee, City Management and City staff prior to submission to City Council for approval. Additionally, the City has adopted the Virginia Stormwater Management Handbook, First Edition as the standards and specifications for this ordinance. Final approval by City Council was in late June 2007 and became effective July 2007.

Schedule and Evaluation:

Currently in effect in the City as of July 2007.

Responsible Parties: The Program will be administered and enforced by the Engineering department.

Necessary Documents: Stormwater Management Ordinance, SWM plans, SWM facility maintenance agreement, permits & bonds.

Items to be Reported in the Annual Report: Associated documents as necessary.

Modifications per Required BMP:

Revise ordinance to reflect requirement for a DCR small construction permit for 1 acre or greater disturbed area projects.

BMP 12A – Requirements for Stormwater Management Facilities Agreement

As part of the new stormwater management ordinance, developers are required to develop a stormwater management maintenance agreement that will identify the necessary O & M guidelines for all required SWM BMPs, including inspection schedules. The maintenance agreement must be approved by the City Engineer and City Attorney, signed by the Mayor and recorded by the Clerk of Courts as part of the land disturbing and development process.

Pollution Prevention/Good Housekeeping

BMP 13—Employee Training

The City of Salem established a training course for all new employees with instruction on methods to reduce stormwater pollution from various activities. A timetable was established to train all City employees as well as all new hires. All employees will be required to attend refresher training every permit cycle (5 years).

Schedule and Evaluation:

Currently in effect in the City as of March 2004.

Responsible Parties: The Program is administered by the Human Resources Department with development assistance from the Engineering, Streets and Maintenance, and Electric Departments.

Necessary Documents: Training PowerPoint presentation & number of people to view training.

Items to be reported in the Annual Report: Training PowerPoint presentation file, the number of employees to view training and all other associated documents as necessary.

Modifications per Required BMP Admin Update: Modify training of employees to emphasize bacteriological and sediment control BMPs.

BMP 14—Certified Land Disturber for Supervisors

The City of Salem determined that certain supervisors needed to be VDCR Responsible Land Disturbers (RLD) and be present when the City conducted any land disturbing activity as part of the City's day to day activities. The Engineering, Street and Maintenance, Water & Sewer and Electric Departments submitted a list of personnel and a timetable to have these individuals certified as a RLD.

Schedule and Evaluation:

March 2004 10% of goal

March 2006 50% of goal

March 2008 100% of goal

The City is maintaining these certifications at the same level and continues to require these individuals keep their RLD current.

Responsible Parties: Same as listed above.

Necessary Documents: Documentation from DCR regarding certification

Items to be reported in the Annual Report: As required.

Modifications per Required BMP Admin Update: 100% goal has been met. The City will work on maintaining proper certification of relevant personnel as required.

BMP 15—City Housekeeping plan

The City of Salem has used resources from the training BMP 13 to be used as a housekeeping document to be used for staff that deals with any material that can pose a hazard to the environment. Individual departments have further developed this material for the department specific needs. All incidents, conflicts and issues that come up are evaluated by the City Engineer and other directors and may be discussed with the Assistant City Manager to produce a solution.

Schedule and Evaluation:

Ongoing

Responsible Parties: Streets and General Maintenance Department and Engineering Department.

Necessary Documents: Documentation, specifically any incidents and solutions

Items to be reported in the Annual Report: As required.

Modifications per Required BMP Admin Update: TBD

BMP 16 – Continued Use of Street Sweeping

The City has purchased a Tyco D5T6 street sweeper to compliment and add a reserve capacity to the City's current regenerative air sweeper model 600 BAH. This will give the City two regenerative air sweepers. Details and specifications are included in this statement. This sweeper will let the City utilize the most cost effective BMP for heavy metals, suspended solids, sediments and other non point source contaminants.

Schedule:

Ongoing and continuing. Sweep of collector streets in the City a minimum of 6 times a year and all auxiliary and accessory streets twice a month. Report yearly totals in tons. Use sweeper in situations to pick up deposits that may prove harmful to the environment.

Responsible Parties: Streets and General Maintenance Department

Necessary Documents: Tonnage report, special incidents

Items to be reported in the Annual Report: Same as necessary documents

Modifications per Required BMP Admin Update: TBD

City of Salem
Attachment for Part 6
VSMP GENERAL PERMIT REGISTRATION STATEMENT FOR STORMWATER DISCHARGES
FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Principle Executive Officer or Ranking Elected Official:

Title: Assistant City Manager

Name: James E. Taliaferro II

Duly Authorized Representatives

The following is a list of people responsible for implementing the minimum control measures outlined in the NPDES Registration Statement for the City of Salem:

Todd Sutphin	Building Official
Beth Austin	Director of Human Resources
A.K. Briele, III	Director of Electric Department
Caleb Taylor	Director of Water & Sewer Department
James M. Fender, Jr.	Director of Solid Waste Disposal
Melinda J. Payne	Director of Planning and Development, Public Information Officer
Horace A. Seibert	School Superintendent
Mike Stevens	Communications Director
Norman M. Tyler, Jr.	Director of Streets and General Maintenance
Charles E. Van Allman, Jr.	City Engineer

The names of the people on this list will be updated as necessary and included as part of the annual report.