

Program Overview

The Town of Poughkeepsie is located on the eastern shore of the Hudson River in Dutchess County, midway between Albany and New York City. The Town surrounds the City of Poughkeepsie on all sides except the west, where the city borders the Hudson River and Ulster County. Suburban characteristics dominates land use within the town, with mixed-use urban areas adjacent to the City of Poughkeepsie. Approximately 44,000 residents live within the Town's nearly 20,000 acres. Other bordering municipalities are Hyde Park to the north, Pleasant Valley to the northeast, LaGrange to the east, and the Town of Wappinger and Village of Wappingers Falls to the east and south.

In March 2003 the town commenced development of an ongoing stormwater management program intended to:

- reduce and prevent non-stormwater discharges from entering or polluting the municipalities storm sewers, streams, rivers, and waterways
- demonstrate responsible stewardship of the natural environment by the Town of Poughkeepsie.
- satisfy the requirements of the SPDES General Permit for stormwater discharges from Municipal Separate Stormwater Systems (MS4's)

The stormwater management program focuses on six fields of actions addressing goals for:

- Public Education and Outreach,
- Public Involvement and Participation,
- Illicit Discharge Detection and Elimination,
- Construction Site Run-off Control,
- Post Construction Stormwater Management, and
- Pollution Prevention or Good housekeeping by the town

Initial goals for development of the program were established in 2003 in a "Notice of Intent" and updated via annual reports prepared on the activities to achieve program development goals prior to January 2008. This narrative has been prepared to identify the achievement of those program development goals, the continued implementation of the stormwater management program, and the methods planned to further develop the program.

The Fallkill Creek and Wappinger Lake have been recognized as waterbodies that have impaired quality attributed to stormwater discharges. Sediment and phosphorus have been identified as the contributing pollutants of concern. Much of the efforts of the program focus on preventing and reducing the concentration of these pollutants in stormwater runoff.

Public Education Measures

The town has developed and is implementing a public education and outreach component of the program that describes:

- the impacts of stormwater discharges on waterbodies
- the pollutants of concern and their sources
- steps that contributors of stormwater and non stormwater discharges can take to reduce the pollutants

Homeowners, local businesses, (particularly institutions conducting landscaping or grounds keeping operations), and the construction industry have been identified town wide as target audiences for education in steps to reduce contribution of pollutants such as sediment and phosphorus. Audience specific educational brochures identifying steps to reduce pollutants are distributed via direct mailings to businesses and homeowners, as well as distributed at town hall by the departments where contact is made with each target audiences. These brochures additionally address the hazards of illicit non-stormwater discharges from improper waste disposal or dumping and steps to eliminate and report illicit discharges. Television and radio programs are also used to reach homeowners and the business community. Procedures have been developed to air "After the Storm" a USEPA prepared video on public access television during 2008 , and program representatives have been guests on the weekly chamber of commerce radio show to discuss the impacts, pollutants and steps to reduce pollutants.

Construction industry audiences & institutional grounds keeping departments are invited to training seminars & workshops in proper operations to reduce pollutant discharges.

Construction industry workshops focus on administrative and implementation criteria for conducting operations in compliance with both state and local laws.

Additional measures are planned to continue implementing the public education component of the stormwater program. Brochures for local businesses as well as homeowners will be distributed at the Town Highway Garage during bulk waste collection days as of June 2008. Brochures for upcoming construction industry workshops as well as brochures identifying proper construction methods to reduce pollutants will be directly distributed by compliance inspectors to construction site operators as of June 2008.

Further development of the education components of the program will focus on the methods used to evaluate its effectiveness. The current evaluation method consists of quarterly review of implementation goals and activity documentation. While this has proved a benefit for program management, additional indication of the impact program activities have had on public awareness and behavior is preferable. As of August 2008 public survey data from the Vassar Environmental Research Institute will be used as a baseline of awareness and behavior. Future survey data, available from watershed groups, research groups or as conducted by the town in August 2011 and then on a 3 year cycle will be used for periodic assessment with baseline data.

PUBLIC DRAFT- PLEASE PROVIDE COMMENT TO: ehollman@TownofPoughkeepsie-ny.gov

Public Involvement Measures

The town has developed and is implementing a public involvement/ participation component of the program that

- identifies key individuals and groups who are interested in or affected by the stormwater permitting program (stakeholders).
- identifies the type of input requested
- describes the activities to provide program access and gather input from stakeholders

The program has identified a public contact in the planning department who administers and retains contact data of interested parties or stakeholders including watershed groups, members of the public, professional educators and researchers to assist in promoting and advertising education and involvement opportunities as well as encouraging volunteerism at stewardship events. These interested parties and stakeholders are contacted to provide input or expertise for the identification, selection, implementation and evaluation of practices and goals as well as comment on the Annual Reports. Municipal staff and consultants meet with stake holder groups to discuss program implementation and identify education and involvement activities.

Further development of the municipal stormwater program will focus on the methods used to evaluate its effectiveness. The current evaluation method consists of quarterly review of implementation goals and activity documentation. While this has proved a benefit for program management, additional indication of the impact program activities have had on runoff quality and receiving water quality is preferable. Input by watershed groups and researchers institutions regarding runoff and receiving water quality is a critical component of further developing assessment methods. Receiving water quality monitoring of the Fallkill and Casperkill is currently being conducted by Dutchess Community College students and the Vassar Environmental Research Institute (ERI) respectively. Runoff and receiving water quality monitoring is being considered for implementation by the “Friends of the Wappinger Lake” at the lake as well as by the ERI for the Fallkill and Wappinger Lake. As of August 2008 current and historic sampling data of the Casperkill will be available for use as a baseline for water quality. Future survey data from researchers and watershed groups will be used to establish baseline data and in 2011 and then on a three year cycle for periodic assessment of runoff and receiving water quality with baseline data.

Illicit Discharges

The town has developed and is implementing a program to detect, identify and eliminate illicit non stormwater discharges, including illegal dumping with established procedures for dry weather surveys, tracing illicit discharges to their source and enforcement to remedy/remove sources.

Dry weather surveys of stormwater outfalls are conducted by the town engineer on a continuing cycle so that all outfalls are inspected every five years. Outfalls are also inspected whenever a suspicious discharge is reported by members of the public or municipal field staff. Records of each survey are retained by the town engineer to review patterns or identify problem areas. Mapping using GIS software is retained to identify the locations of outfalls and is reviewed and updated quarterly by the town engineer to include any newly identified or constructed outfalls. A combination of methods are used by the town engineer to trace illicit discharges to their source as they are identified at outfalls. The town engineer takes enforcement actions including issuance of fines, liens upon property and imprisonment as authorized by the Illicit Discharge Prohibition Ordinance enacted May 18, 2005 to eliminate sources of illicit discharges as they are identified.

The town additionally takes measures that prevent the accidental creation of new non stormwater discharges via improperly routed sewer service laterals or improper dumping of solid waste. Installation of all sewer laterals are reviewed and installation inspected by sewer dept staff to prevent cross connection to the storm collection system. Site inspections are conducted by the Zoning Department upon reporting of dumping or when noted during regular operations of the municipal staff. The zoning officers issue notice of violation and take enforcement action including issuance of fines, liens upon property and imprisonment as authorized by chapter 171 of the town code, enacted September 1971.

Training is provided to municipal staff so effective identification of illicit non stormwater discharges can be conducted. DCSWCD organized workshops are conducted utilizing the 2007 "Pollution Prevention and Good Housekeeping for Municipal Operations" guide prepared by DCSWCD regarding the hazards associated with illegal discharges and improper disposal of waste as well as the identification of illicit discharges/ connections or dumping "in the field" and proper reporting procedures.

Further development of the illicit discharge components of the program will focus on the methods used to evaluate its effectiveness. The current evaluation method consists of quarterly review of implementation goals and activity documentation. While this has proved a benefit for program management, additional indication of the impact program activities have had on employee awareness and behavior is preferable. As of January 2009 pre-quizzes and wrap up evaluation results from the Good Housekeeping workshops will be used as an assessment of employees awareness and behavior.

Regulating Construction

The town has developed and is implementing a construction site regulatory component of the program that enforces regulations to reduce pollutants such as sediment in stormwater runoff from construction activities that result in land disturbances of an acre or greater. Applications to the Planning Board, Building Department, and Zoning Department for such land development activities are required by the Stormwater Local Law adopted May 18, 2005 to provide Stormwater Pollution Prevention Plans (SWPPP's) addressing both structural (e.g. diversions) and non structural practices (e.g. schedules for installation) to prevent the discharge of pollutants during construction as part of the review of the applications. Review comments on the compliance of a project's SWPPP with the local requirements are provided by a licensed engineer.

The Town Engineers office maintains an inventory of construction projects subject to local stormwater regulations and performs compliance inspections of these sites on a monthly basis as requested by the building department and upon request by the building department due to public reporting of a potential violations, or request by owner/operator's of construction sites. The Town Engineer's office provides an inspection compliance summary report to the building department for each compliance inspection. Enforcement actions and sanctions provided by local laws adopted May 18, 2005 are issued by the building dept and compliance inspections and summary reports prepared every other week for escalating enforcement until appropriate site corrections are made.

Public reports of potential violations during construction of project subject to the stormwater regulations are accepted by the stormwater public contact in the planning department as well as at the building department. When reported to the planning department, the notice is forwarded to the building department. Upon notification to the building department, the town engineer's office performs a compliance inspection.

The number and history of active construction sites, SWPPP revisions during plan review , potential violation reports, compliance inspections performed, and enforcement actions are all reviewed quarterly and used to indicate the effectiveness of the program in regards to construction industry behavior and awareness.

Regulating Development

The town has developed and is implementing a post construction regulatory component of the program to reduce the contribution of pollutants in runoff from new development and redevelopment projects that

- Result in land disturbance greater than 5 acres for single family homes or agricultural use
- Result in land disturbance greater than one acre for any other use
- Result in discharge of stormwater to impaired waterbodies

Applications to the Planning Board, Building Department, and Zoning Department for such land development or redevelopment projects are required by the Stormwater Local Law adopted May 18, 2005 to provide Stormwater Pollution Prevention Plans (SWPPP) including structural (e.g. infiltration basin) and non-structural practices (e.g. maintenance procedures for the infiltration basin) to reduce the discharge of post construction pollutants. Review comments on the compliance of a project's SWPPP with local requirements are provided to the board and departments by a licensed engineer. The Local Law also authorizes procedures for SWPPP review, post construction compliance inspection of practices, and enforcement or penalization of violations.

The town engineer's office maintains an inventory of post construction management practices constructed after March of 2003 and earlier constructed practices that have been identified as contributing to a water quality standard violation and performs maintenance and compliance inspections. Stormwater management practices and facilities are visually inspected once at a minimum during the first 6 months of operation to determine proper function and make use of any warranties. Inspections during the first year of operation occur following any 24 hours storm events exceeding 2.8 inches. After the first year of operation public structural practices are visually inspected on an annual basis. After the first year of operation private practices are visually inspected and compliance records reviewed on a bi-annual basis (once every two years).

Maintenance of structural practices is performed by the Highway Department or contracted out as necessary. Enforcement authorization and procedures for maintenance or installation violations include the issuance of a stop work orders and levying of fines upon responsible parties as well as the withholding of certificates of occupancy and the transfer of any restoration costs incurred by the town to a lien upon the subject property.

Fees are collected for inspection in the first year and long term maintenance of privately owned/maintained stormwater management practices via construction completion and maintenance guarantees. Fees are collected for inspection and maintenance of publicly owned/maintained stormwater management practices and long term compliance inspection of privately owned/maintained practices via a Town wide Drainage District.

Good Housekeeping Measures

The town has developed and is implementing an operation and maintenance program to reduce and prevent pollutant discharges in runoff from municipal operations by implementing structural and non structural practices identified in Stormwater Pollution Prevention Plans, Spill Prevention Plans, Operations and Maintenance Plans and specific conditions of work in third party agreements. Pollution prevention priorities at town operated water & wastewater treatment, auto maintenance, and highway garage facilities focus on identifying potential sources of pollution and implementing structural best management practices (eg. salt storage barn) and non structural practices (eg. training policies or procedures) for waste storage & disposal as well as spill prevention and response during operations to prevent the discharge of pollutants. Pollution prevention priorities for operations “in the field” (eg. road & drainage infrastructure), and at town parks focus on implementing non structural best management practices (eg. street sweeping policies or procedures) to reduce the discharge of pollutants.

In house staff training is conducted annually at the Poughkeepsie Water Treatment Facility & Arlington Wastewater Treatment Plant in the facility specific implementation of their plans currently. The plans are reviewed annually by facility staff as part of the training and certifications of employee training retained by the facility managers. Additional workshops will be conducted at all the facilities as requested by management staff during quarterly management meetings.

DCSWCD organized workshops on the implementation of best management practices utilizing the “Pollution Prevention and Good Housekeeping for Municipal Operations” guide prepared by DCSWCD were conducted in 2007 with parks department staff regarding grounds maintenance procedures and with highway garage staff regarding operations in the field and at the garage.

Additional measures are planned to continue implementing the municipal pollution prevention component of the stormwater program. A DCSWCD workshop will be conducted in January 2009 with code enforcement & sewer/water system maintenance staff using the “Good Housekeeping” Guide. The “Good Housekeeping” manual will be reviewed annually by staff and certifications of employee training retained by the department managers. Facility specific Stormwater Pollution Prevention Plans will be authored and implemented for operations at the Town Highway Garage, Auto Maintenance Center and the Country Club Estates Wastewater Treatment Plant. In house staff training at the Country Club Estates Wastewater Treatment Plant, as well as the highway garage and auto center will be conducted when the plans are implemented in 2010 and 2011. The SWPPP’s will be reviewed annually by facility staff as part of the training and certifications of employee training retained by the facility managers. Additional workshops will be conducted as requested by management staff. Pre-quizzes and wrap up evaluation results at the workshops will be compared to assess their effectiveness in raising awareness and changing behavior.