




Phase II MS4 General Permit

• • • • • • • • • •

Annual Report 2016

Town of Lisbon
Department of Public Works

1 Newent Road
Lisbon, CT

March 2017

Prepared by CLA Engineers Inc.
317 Main Street
Norwich, CT 06360



Introduction

This document presents a summary of the Town of Lisbon's efforts to comply (for 2016) Environment Protection Agency (USEPA) and Connecticut Department of Environmental Protection (CTDEP) under the Phase II Municipal Separate Storm Sewer Systems (MS4) General Permit. Each of the six MCMs are listed below, along with information regarding completion or alteration of the tasks set forth in Lisbon's original part B submittal.

Please note that CTDEP conducted an on-site audit in 2017

Stormwater Management Plan, Minimum Control Measures

For each Minimum Control Measure, the Town of Lisbon has defined appropriate Best Management practices (BMPs); designated a person(s) and responsible for each BMP; defined a time line for implementation of each BMP (Refer to Table 1 which was part of the original Part B submittal); and defined measurable goals for each BMP. The Minimum Control Measures (MCMs) and pertinent data for the Town of Lisbon Stormwater Management Plan are listed in tabular form for each MCM as follows. Each measure proposed in the original plan (i.e. the Part B submittal) is listed below; progress made on the measure in each year follows in boldface. The measures listed below are presented in their order of appearance in Part B submittal.

(1) Public Education and Outreach

The first BMP, education of developers, targets a group that is most likely to be affected by and involved in stormwater discharge and permitting. The goal of the educational program is to present developers with recent concepts in site design that minimize the potential for pollution due to storm water runoff and encourage incorporation of these concepts in plans submitted with permit applications. **A handout providing resources for this information has been prepared and made available with land use regulations and applications at the town hall. This continued to be available at the town hall in 2016**

The second BMP, mass circulation of information on importance of maintaining water quality is a "broadcast" method intended to get basic information out to all community residents. This will be accomplished by preparation of a flyer that can be mailed out to all homes in Lisbon. The

flyer will be an 8 1/2 by 11 tri-fold flyer that will cover basic BMPs for homeowners, provide contact information, and solicit input from the public.

Two flyers were prepared and were mailed with the town newsletter, one was mailed in December 2006, the other was mailed in March 2007.

The third BMP will be directed to the town government and the public. To keep town officials informed, the Director of Public Works will make a yearly presentation to the Town Council, to be broadcast on the local public access cable network, regarding Phase II stormwater permitting. The presentation will educate the officials about stormwater management and keep them updated regarding the status of the permit. By broadcasting it on the local public access channel, it will reach local households, reinforcing the information in the mass mailing. **This BMP has not been completed, as an alternative the information was placed on the Town of Lisbon web site in January 2007. The web site was temporarily down during part of 2009 and 2010, however new information and annual reports have been put on the new web site and were revised in 2012. The information continues to be available on the town website through 2016.**

The fourth BMP will consist of broadcast of Non Point Education for Municipal Officials (NEMO's) educational videotape: "Luck Isn't Enough: The Fight For Clean Water. NEMO describes this video as "A 13-minute professionally produced video for the general public on non point source pollution -- its causes, effects and what individuals and communities can do to combat it." This video will be broadcast on the local public access cable station. **This BMP has not been completed, as an alternative the information was placed on the Town of Lisbon web site in January 2007 and updated on an ongoing basis, including 2012. In 2013, additional information was added to the website. Additional information was posted and continues to be available through 2016.**

The Public Works Department will develop a library of materials to be made available to the public, both at the town hall, and the public library. This fifth BMP will be a compilation of existing materials from sources such as the Natural Resources Conservation Service, NEMO, CTDEP and EPA, that can provide citizens with information on what they can do to help reduce stormwater related pollution. The local garden center is included as it can be a particularly effective a point of distribution of educational materials to the appropriate audience. **This library of materials has been in development.**

For the sixth BMP, local scout troops and other volunteers will be solicited to stencil catch basins within sensitive watersheds selected by the Public Works Department. This measure will also be considered part of the Public Involvement/Participation BMPs. **This BMP is currently (2016) being implemented by the middle school science club and will continue.**

(2) Public Involvement/Participation

As required by the Phase II General Permit, The Town of Lisbon will establish a public involvement/participation program that complies with public Notice and Freedom of Information requirements. The public will be involved in developing, implementing and reviewing the stormwater management plan.

Two public meetings will be held to solicit public input. The meeting during the first year will be to solicit public input regarding the stormwater management program, and the meeting during the third year to receive public input regarding the efficacy of the program.

These meetings have not yet been held. In their place, public input was solicited during the both the 2007 and 2008 Harvest Fair, which is held on the third weekend in September of each year.

As indicated under the Public Education and Outreach MCM, local scout troops, and other volunteers will be solicited to stencil catch basins within sensitive watershed selected by the Public Works Department. This activity is anticipated to occur in each of the five years of the program and to initially be targeted to the most sensitive watersheds as determined by The Department of Public Works during year 1. **This BMP is currently (2016) being implemented by the middle school science club and will continue**

(3) Illicit discharge detection and elimination.

The requirements published by CTDEP in the Phase II MS4 General Permit regarding illicit discharge detection and elimination are specific and will be adhered to by the Town of Lisbon via the several specific measures outlined and described in the table and text below.

The first proposed BMP is implementation of an ordinance or other regulatory mechanism to effectively prohibit non-stormwater discharges and impose sanctions to ensure compliance, to the extent allowable under State or local law. **Currently, CLA Engineers and the Town Planner are reviewing local regulations. Appropriate revisions to local regulations will be conducted under the next 5 year permit.**

Circulation of educational materials, BMP #2, will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste via mass mailing. These educational materials will be a subset of the library developed for the Public Education and Outreach BMP and they will specifically focus on hazards

As specified by CTDEP, the following BMPs (Refer to Table 5) are planned within Lisbon's Urbanized Area. **This library of materials has been developed and revised in 2009 and 2010.**

As BMP 3, a map, based on existing DPW infrastructure mapping will be developed showing all stormwater discharges with a diameter of 12" or greater (or equivalent cross-sectional area) operated by Lisbon. The map will help to document location and nature of dry weather discharges. For each discharge the following information shall be included:

- Type, material, and size of conveyance, outfall or channelized flow (e.g. 24" concrete pipe)
- The name of the immediate surface water body or wetland to which the stormwater runoff discharges;
- If the outfall does not discharge directly to a named waterbody, the name of the nearest named waterbody to which the outfall eventually discharges;
- The name of the watershed in which the discharge is located.

The final map has been prepared and is on file in town hall and CLA Engineers.

The Town of Lisbon Public Works Department already has an infrastructure inspection program in place. The DPW regularly inspects drainage structures for cleaning and repair purposes. This program also serves as the Town's means of identifying and reporting illicit discharges. When an illicit discharge is detected during inspection, it is reported to proper authorities including CTDEP. This program will be reviewed and modified as necessary to meet CTDEP requirements. This BMP is in place. **The town has conducted cleaning (pumping catchbasins), inspection and repair of drainage infrastructure in 2015. CLA engineers assisted in inspection for illicit discharges in the Town Hall neighborhood and during road re-design projects in 2011 and 2012. In addition (under order from CTDEEP) the storm drain system at the DPW garage was re-designed and re-constructed to eliminate the storm water discharge in 2011.**

BMP 5, detecting and addressing future illicit discharges and illegal dumping, will be handled in much the same manner as existing illicit discharges. The Lisbon DPW already has an inspection schedule for drainage infrastructure and the ongoing inspections will be used to discover new violations. Also, for new land development, the site planning process that is necessary to obtain local land use permits will continue to promote site design that does not lead to illicit discharges. **During mapping of outfalls (2004-2005), CLA Engineers made observation as to which made have**

illicit discharges, these are being investigated by Town staff on an ongoing basis including during 2016.

(4) Construction site stormwater runoff control

The Town of Lisbon has, within its inland wetland and planning and zoning regulations, regulatory authority over the site planning and development process, including numerous provisions for dealing with stormwater runoff control. These regulations already require sedimentation and erosion control, site planning, control of waste, public input, and site inspection and enforcement.

Because the Town of Lisbon already has regulations to address nearly all of the items listed under this MCM, only two BMPs (Refer to Table 6) are proposed. The first is the development of a handout that will inform construction site developers and operators of their requirements for registration under the General Permit for the Discharge of Stormwater Associated with Construction Activities. This handout will be provided to each party that applies for any land use activity involving construction in the Town of Lisbon. **A handout providing resources for this information has been prepared and is available with land use regulations and applications at the town hall and was available in 2016.** The second BMP consists of documenting existing regulations and revision of local regulations so that they meet the standards of the Phase II MS4 General Permit. The following specific areas will be considered.

- Review and modify the existing program, already within the Lisbon's Planning and Zoning and Wetlands regulations to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre (Or less).
- Review town regulations that require erosion and sediment controls, as well as sanctions for non-compliance, to the extent allowable under State or local law;
- Review requirements for construction site operators to implement appropriate erosion and sediment control best management practices.
- Review requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- Review procedures for site plan review, which incorporate consideration of potential water quality impacts.
- Review procedures for receipt and consideration of information submitted by the public.
- Review procedures for site inspection and enforcement of control measures.

The Town planning and wetlands departments within the first two years of the program will perform the measures specified above. Those departments will provide a memo to the Department of Public works that verifies the town's compliance with Phase II and makes recommendations for revisions to regulations where necessary for compliance. Revisions will be considered by the agencies by year 4. **Review of these regulations is underway by CLA Engineers in consultation with the Town Planner and was begun in Drafts of these regulations were completed in the 2009 -2010 period. This will be completed in under the next 5 year permit**

(5) Post-construction stormwater management

As indicated above under "Construction site stormwater runoff control" the Town of Lisbon has, within its inland wetland and planning and zoning regulations, regulatory authority over the site planning and development process, including provisions for dealing with sedimentation and erosion control and stormwater discharge. This authority extends to specification of stormwater systems cleaning and maintenance programs that are to be carried out after construction is complete. In order to ensure compliance with the Phase II MS4 General Permit, the Town will:

- Review how the existing regulations and program address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or directly to waters of the State. This program shall puts controls in place to prevent or minimize water quality impacts;
- Review strategies which include a combination of structural and/or non-structural best management practices including BMPs already within the regulations;
- Review or write, as necessary, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law;
- Review methods for ensuring adequate long-term operation and maintenance of BMPs per the existing regulations.

Because Lisbon's regulations already address, at least partially, all of the Phase II requirements for post-construction stormwater management, the sole BMP for this MCM (Refer to Table 7) will be review and revision of the regulations, to be done by the town planning and inland wetlands offices. They will provide a memo of findings and suggestion for revisions to the regulations to the Director of Public Works by the end of year 2, and revisions will be considered by the agencies by the end of year 4. **Review of these regulations has been done by CLA Engineers and draft changes were completed in 2010.**

(6) Pollution prevention/good housekeeping for municipal operations.

The Town of Lisbon Public Works Operation and maintenance program already includes training components for municipal employees and contractors and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The first BMP for this MCM (Refer to Table 8) will consist of formalizing the program by preparing a document that provides the schedule and scope of training. The document will include copies of information from USEPA, CTDEP and other agencies that provide information useful in training DPW workers regarding stormwater quality issues. **The training was completed on November 14, 2006. Additional training is scheduled for 2017.**

As the second BMP, the Lisbon DPW's existing infrastructure maintenance program, which includes street sweeping, catch basin cleaning, and performance of repairs, retrofits and upgrades, will be reviewed for consistency by the Director of Public Works, and revised to meet the Phase II requirements. The Director of Public works will produce a document that proscribes the activities and schedule for this program. This document will also have a specific section for street sweeping and catch basin maintenance within the Urbanized Area. **This document is currently being revised.**

Monitoring

The Town of Lisbon during the ongoing years of the program will conduct Stormwater monitoring. Two outfalls apiece shall be monitored from areas of primarily industrial development, commercial development and residential development, respectively, for a total of six (6) outfalls monitored. Each monitored outfall shall be selected based on an evaluation by the MS4 that the drainage area of such outfall is representative of the overall nature of its respective land use type. Sample collection and Laboratory analysis will be performed per the methods described in the Phase II General Permit. One round of sampling has been conducted. **Monitoring was conducted and provided to CTDEP for 2016.**