



SECTION 1. INTRODUCTION

1.1 Purpose

The Clean Water Act (CWA) was passed in 1972 to help protect and restore the waters in our Nation's streams, rivers, and lakes. In the early 1990s, Phase I of the National Pollutant Discharge Elimination System (NPDES), under authority of the CWA, was passed to regulate stormwater management in large urban areas. Phase II regulations were developed and passed near the turn of the century requiring medium size cities meeting a certain population density and other criteria to develop stormwater initiatives to address pollution associated with urban runoff. In March of 2003, the City of Shelbyville, and numerous other "Phase II Cities and Counties" submitted permit applications to the Kentucky Division of Water outlining a 5 year plan for addressing the Phase II requirements.

The thought behind the Phase II program is that urban runoff is a chief cause of stream impairment, and that urban runoff can be managed in large part by effectively addressing a few key areas; educating and involving the public on the impacts of urban runoff and how the public can help, managing the storm sewer infrastructure and addressing illicit discharges (discharge of pollution / polluted runoff), implementation of local regulatory authority, development of best management practices (BMPs) for construction and post-construction, and environmentally sensitive and responsible municipal operations. This BMP manual was developed to support Phase II efforts in addressing Construction Site Runoff and Post Construction Runoff as required by the Phase II permit for Shelbyville and numerous other Phase II communities. Additionally, a number of the BMPs address municipal operations, and residential issues and can be used for sharing information with the public.

The KY Division of Water issued the statewide construction stormwater general permit, KYR10, in August 2009 that will be in effect until July 31, 2014. This permit regulates stormwater discharges from construction sites that disturb an acre or more or less than an acre if part of a larger common plan of development. The City's stormwater management program incorporates the requirements of KYR10.

This manual presents a brief introduction to stormwater Best Management Practices (BMPs). The following types of BMPs are addressed: Site Planning and Design Practices (SPD); Erosion Prevention Practices (EPP); Sediment Management Practices (SMP); Good Housekeeping Practices (GHP); BMPs for Residential and Homeowners (RHP), Stormwater Pollution Prevention Practices (SPP), and Stormwater Pollution Treatment Practices (PTP). The manual describes how BMPs can be selected, and contains a series of fact sheets for each type of BMP to be used in the area. The intent of the Stormwater Best Management



Practices Manual is to provide guidance on BMP selection, design, and implementation to plan submitters, reviewers, construction site operators, and site inspectors. There are also guidance materials for activities at commercial and industrial facilities.

The fact sheets are categorized, focused, and concise so that they may be used as quick references for design, inspection, and maintenance guidance. In this way, the fact sheets are designed to be stand-alone documents that may be distributed to facilitate discussion about design and/or implementation of the management practice. Many of the practices are considered structural practices in that they involve construction. However, several of the BMPs cover non-structural practices where normal activities are performed in a different manner with stormwater quality in mind. An example site design is used throughout the PTP fact sheets to demonstrate their design.

1.2 Goals of the Program

In support of the information provided in the City of Shelbyville Code of Ordinances Chapter 32, goals of the post-construction runoff management program are:

1. Improve the Quality of the City of Shelbyville's water resources by:
 - Implementing of minimum control measure
 - Providing education to citizens
2. Provide protection of the short-term and long-term public health, safety, and general welfare by:
 - Providing for regulation and management of Shelbyville's stormwater system, including public and private facilities in the Shelbyville service area.
 - Protecting, and preserving stormwater quality and fish and wildlife habitat within the City of Shelbyville.
 - Protecting those downstream from stormwater quality impairment.
3. Comply with state and federal stormwater regulations developed pursuant to the Clean Water Act Amendments of 1987 and subsequent amendments.
 - Managing the quality of stormwater discharged to the MS4 by controlling the contribution of pollutants associated with development and redevelopment activity.
 - Controlling stormwater pollution caused by the suspension and transport of soils and other sediments.
 - Facilitating the use of the public and private stormwater management systems that will not result in excessive maintenance costs.