

United States and State of Indiana v. City of Fort Wayne, Indiana

Consent Decree

Appendix 6

**Federal Supplemental
Environmental Project Plan**

CITY OF FORT WAYNE, INDIANA

FORT WAYNE CITY UTILITIES

Supplemental Environmental Project

Septic System Elimination Program

TO:

The United States Environment Protection Agency

December 2007

The City of Fort Wayne (City) provides municipal sewage treatment and/or conveyance services to nearly 85% of the developed area in the Fort Wayne Metropolitan area. This represents approximately 80,000 sanitary sewer customers. The City system includes the operation of sewage treatment plant with a current peak capacity of 60 MGD and over 1,100 miles of sanitary sewer piping. The central area of the City is served by a combined sewer system.

The City's Long-Term Control Plan (LTCP) contemplates watershed-based solutions to control combined sewer overflows (CSOs). These solutions will be implemented over the next 18 years as described in the LTCP. In effort to continue improving water quality and enhance public health and the environment, the City has identified septic systems as a non-CSO related pollution source that has the potential to impair the City's CSO receiving streams. The Supplemental Environmental Project (SEP) described below is intended to help address this non-CSO related pollution source.

SEPTIC SYSTEM ELIMINATION PROGRAM

Project Overview and Purpose

The City proposes to undertake efforts focused on the elimination of failed or failing septic systems located throughout its service area with a focus on those located within developed/urban areas. This SEP will include a 4-year \$400,000 investment that will eliminate 133 existing septic systems in high priority areas within said 4 years. The City is not required by any law or ordinance to complete the work described in this SEP.

There are currently approximately 1,600 septic systems within the City's sanitary sewer service area. Of these approximately 1,600, approximately 500 are located within the serviceable area of Fort Wayne's City limits. Septic systems have a limited life and generally afford unpredictable performance over time. Failing septic systems often lead to human exposure to bacteria, including E. coli, which ultimately appears in neighborhood streams and ditches and even in yard areas when systems 'boil' up out of the ground. Having these conditions within densely developed areas creates a greater risk of human exposure. To better mitigate these risks to area waters and residents, the City has developed this proposed SEP which will serve to help eliminate septic systems within City limits.

The City has identified and evaluated approximately 130 areas inside and/or near the City service area where clusters of homes are served by private on-site waste treatment or septic systems. The attached Exhibit identifies these potential septic relief areas. The clusters may contain as few as three or four or as many as 100 or more individual septic systems. Fort Wayne has evaluated cluster areas of septic systems for serviceability, constructability and environmental impact.

In septic system neighborhoods, most home's sewage exits from a tank system on the private property via a gravity discharge pipe. These pipes may discharge into a common pipe (often referred to as a septic drain line or field tile) that conveys the sewage to the nearest open ditch,

stream, river or other waterway. These septic system drain lines can convey septic waste thousands of feet underground through piping before the effluent is ultimately discharged into an open waterway. While some discharging septic systems that have been properly maintained may discharge effluent that meets water quality standards, many systems discharge high levels of bacteria that can eventually make its way to an area ditch, drain, stream or river. The proximity of septic systems to local waterways can be observed on the attached Exhibit.

Research performed by Purdue University estimates that one-quarter of the septic systems in the State have failed or are failing. They have also estimated that every failing system can discharge more than 76,650 gallons of untreated wastewater to groundwaters and surface waters per year. That means that the estimated 500 failing septic systems in Fort Wayne and the City's serviceable area are introducing approximately 38,000,000 gallons of raw or only partially treated sewage into the environment annually.

Untreated wastewater contains excessive nutrients (nitrogen and phosphorus) that can harm native plant and fish populations and it can choke off the oxygen supply in surface waters and eventually lead to gradual environmental degradation. Untreated or partially treated wastewater can also lead to microbial populations in these surface waters exceeding regulatory full-body contact standards.

Fort Wayne's Septic System Elimination Program will eliminate this risk within the areas of septic system removal and reduce impacts to local groundwater and surface waters by transporting this wastewater to the City's Water Pollution Control Plant for treatment. It is estimated that this program will account for the elimination of approximately 26% of the septic systems located within the service area of the City.

City staff will oversee the implementation of the Septic System Elimination Program through its Capital Improvement Program. This will include planning, designing, bidding and managing the construction of the projects. The program will also entail working with the various neighborhoods and property owners within these areas by holding public information meetings and sending out mailings. A cost-share program, as noted below, will be adopted and administered by the City that provides for a sanitary sewer utility subsidy for each affected property.

Project areas will be selected based on various criteria including: failure rate of existing septic systems and associated impacts (as provided by the local Board of Health), impact on the City's drinking water source (St. Joseph River), constructability and degree of property owner interest and involvement in the project

Project Scope, Schedule and Cost

The total engineering and construction (capital) costs for the elimination of 133 septic systems is estimated to be approximately \$1,899,000. The City will adopt a cost share program that provides a sanitary sewer utility subsidy for each benefited property. This City subsidy will be applied toward engineering and construction-related costs for the various projects and is estimated to be \$400,000 (at a minimum). This contribution of \$400,000 represents

approximately 21% of the estimated cost of the engineering & construction (capital) portions of the program. The remaining approximately \$1,499,000 of capital costs is anticipated to be paid by the benefited property owners. Additionally, the City will offer and administer a robust finance program for property owners that will include multi-year financing options to assist individual property owners in paying for their share of the cost of the sanitary sewer extension project. City administrative costs for overall program management and the financing program implementation are not included in the \$400,000 program costs, all of which represents capital costs (no one-time non-depreciable expenditures or annual recurring costs are included within the estimated \$400,000 contribution).

Consistency with U.S. EPA SEP Policy

According to the U.S. EPA SEP policy (May 1, 1998):

To further EPA's goals to protect and enhance public health and the environment, in certain instances environmentally beneficial projects, or Supplemental Environmental Project (SEPs), may be part of the settlement.

The proposed SEP described above is consistent with the U.S. EPA's Policy. Notably:

- This SEP proposes work that will be environmentally beneficial to Fort Wayne's receiving waters and protective of public health.
- The City agrees to undertake this project in settlement of an enforcement action.
- The City is not otherwise legally required to perform this project.

Progress Reports

The City will submit to U.S. EPA progress reports upon implementation of the SEP project along with each milestone report required under the Consent Decree. Each progress report will provide the status of the Septic System Elimination Program, and will provide information about any elements of the program that were completed during the reporting period.

Modification/Substitution of Projects

The City may modify the project or may substitute a similar project for the Septic System Elimination Program identified above with the advance written approval of U.S. EPA provided that the alternative SEP represent costs at least equal to those described herein for the Septic System Elimination Program.

Substantial Compliance

The City will be in compliance with the requirement to implement this SEP provided it eliminated 133 septic systems by December 31, 2011 and documents the same in the required SEP Completion Report.

SEP Completion Report

Within 120 days after completion of the SEP, the City shall submit to U.S. EPA a final SEP Completion Report documenting the City's elimination of 133 septic systems. Upon U.S. EPA's written acceptance of that completion report, the City shall be deemed to have satisfactorily completed this SEP.

CH22233953.3

Legend

- Study Areas
- No Septic Premises
- Board of Health Septic Areas
- Interceptors
- Sanitary Mains
- Combo Sewer Mains
- Force Mains
- Utility Center CTA Sewer Service Areas
- Areas not service by FW but are in the city limits
- Areas Not Served by Fort Wayne
- Areas Served by Fort Wayne Modified
- Area Relinquished by Fort Wayne
- Fort Wayne City Limits

