United States Environmental Protection Agency

RESEARCH PROJECT

National Risk Management Research Laboratory
Water Supply and Water Resources Division
Urban Watershed Management Branch

FIELD VERIFICATION OF NEW AND INNOVATIVE TECHNOLOGIES FOR THE ASSESSMENT AND REHABILITATION OF DRINKING WATER DISTRIBUTION SYSTEMS AND WASTEWATER COLLECTION SYSTEMS

IMPACT STATEMENT

This project will contribute valuable information on the performance characteristics of new technology for use in infrastructure rehabilitation. It will provide additional credibility to the environmental technology and applied research focus area of U.S. Environment Protection Agency's (EPA) Office of Research and Development, by the availability of quality assured data on new and innovative infrastructure rehabilitation technology that is publically accessible.

BACKGROUND:

The use of new technologies has been historically viewed as a risk, especially by state and municipal governments. Limited budgets and less than favorable experiences with new technologies in the past by public works professionals have made it difficult for manufacturers of innovative products to infiltrate the marketplace. EPA's Environmental Technology Verification (ETV) Program was established to provide independent assessment of new technologies and inform potential users through the publication of test results in the form of verification statements and reports.

DESCRIPTION:

ORD's National Risk Management Research Laboratory has funded this research project in support of its Aging Water Infrastructure (AWI) Research Program. This project will perform verification tests on new and innovative technologies for drinking water distribution systems and wastewater collection systems. Initial verification tests will be conducted on chemical grouting materials used for reducing or eliminating infiltration of storm water to sanitary sewer systems. This will be followed by other technologies, which will be determined by a participating stakeholder group.

EPA GOAL: Goal #2 - *Clean & Safe Water*; Objective 2.1.1- *Water Safe to Drink*
ORD MULTI YEAR PLAN: Water Quality (WQ), Long Term Goal: WQ-3 *Source Control*

RESEARCH PARTNERS:
Research Triangle Institute; the National Sanitation Foundation International; and University of Houston Center for Innovative Grouting Material and Technology

Expected Outcomes and Impacts:

It is expected that this project will result in enhanced acceptance, reduced national costs, and improved aesthetics of new and innovative technologies for integrating green and gray infrastructure for combined sewer overflow (CSO) and stormwater pollution abatement; assistance to utility managers having combined and separate sewerage systems in choosing cost-effective control alternatives; support for EPA Program Offices to satisfy the Clean Water Act's Stormwater Permitting and National (CSO) Control Policy; and Kansas City, Missouri will use project results for the implementation of CSO control for the entire city.

Outputs:

Outputs from this project will assist EPA's program and regional offices in meeting their programmatic requirements. This project's outputs will also help utilities to more effectively implement comprehensive asset management, provide reliable service to their customers, and meet their Clean Water Act and Safe Drinking Water Act requirements. Current and expected outputs include technology stakeholder group meeting reports, verification statements and reports, and conference proceedings.

Resources:

Aging Water Infrastructure Research Program: http://www.epa.gov/awi/

Urban Watershed Management Research: http://www.epa.gov/ednnrmrl/

Environmental Technology Verification Program: http://www.epa.gov/etv/

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EPA/600/F-09/034
October 2009