

SSO REDUCTION
AND CMM PROGRAM COMPLIANCE

Dan Hegwald, P.E.
Associate, Project Manager

With 6 exceptions, the following text is a summary of the following text.

Many cities and municipalities throughout the United States experience sanitary sewer overflows (SSOs) during periods of intense rainfall. With the nation's population becoming more environmentally conscious, environmental regulatory agencies have seen increased pressure to implement more stringent regulations and enforcement policies. Most regulatory agencies encourage and in some cases require cities and municipalities to implement a Sanitary Sewer Evaluation Study (SSES) as a first step to reducing sanitary sewer overflows and bypasses.

Municipalities are faced with multiple variations of implementing a SSES program. Oftentimes, the selection of a SSES program is controlled by time constraints imposed by a regulatory agency or budget. The size of the physical sewer collection system may also be a driving factor in the selection of a SSES program. If a municipality has received an Administrative Order or Consent Decree from a regulatory agency, their program may be required to follow a specified progression of activities and reporting. If negotiations with a regulatory agency are pending or if a proactive status is desired, the SSES program implemented should be tailored to best fit the municipality's ultimate goals and budget constraints.

Variations of a SSES program may range from a full investigation and evaluation of the collection system or may include only one or two inspection activities with minor reporting. A complete comprehensive SSES program may include manhole inspections, line tapping, smoke testing, building inspections, line cleaning and CCTV inspections, flow-trainfall monitoring, flow isolation, hydraulic modeling, cost-effectiveness analysis, and reporting. Depending on the age and condition of the existing collection system, the complete collection system or only a small portion may be evaluated. Other cost saving alternatives should be evaluated such as conducting field inspection activities and/or analysis of data with in-house staff.

The purpose of this presentation is to present a common general approach for identification, quantification and elimination of SSO. The presentation will provide estimated costs for implementation of an effective SSES rehabilitation program. Reasonable goals for inflow/infiltration (I/I) elimination will be provided with estimated rehabilitation costs. In addition, the future of SSO compliance will be addressed. Proper implementation of a SSO abatement program will achieve a significant portion of the goals identified in the United States Environmental Protection Agency's proposed Capacity, Management, Operation and Maintenance (CMMO) program.

For more information, please contact Dan Hegwald at dh@hewlett.com
Copyright © 2000 University of Houston