EPA Response to Comments

Louisville and Jefferson County Metropolitan Sewer District XL Project

This is a response to comments received regarding the draft Final Project Agreement (FPA) for the Louisville and Jefferson County Metropolitan Sewer District (MSD) XL Project announced in the Federal Register on August 29, 2000. The United States Environmental Protection Agency (EPA) appreciates the thoughtful input that stakeholders have provided on this project and would like to take this opportunity to thank stakeholders and address their latest comments.

Project XL is a voluntary national pilot program that allows state and local governments, businesses, communities, and federal facilities to develop and test innovative strategies for providing better or more cost-effective methods of achieving public health and environmental protection. In exchange, EPA may offer regulatory, program, policy, or procedural flexibilities to conduct the experiment. EPA, the Commonwealth of Kentucky Department for Environmental Protection (KYDEP) and MSD believe that this project is an excellent candidate for Project XL and that it is likely to produce net environmental improvements that go beyond what would be achieved using the current regulatory pretreatment program requirements. This project meets or exceeds the criteria for participation in Project XL as described in the FPA. In fact, while some flexibilities are proposed, many aspects of the proposed pretreatment program under the Louisville and Jefferson County Metropolitan Sewer District XL Project include additional, more stringent and cost-effective requirements than federal and state minimum standards.

The focus of this project is to optimize the use of resources in the Jeffersontown Wastewater Treatment Plant (WWTP) sewershed, and to establish links between various wastewater programs (pretreatment, stormwater, sludge, etc.), so as to move towards a more holistic protection strategy for the Chenoweth Run watershed. It is anticipated that MSD will be able to address more diverse sources of pollutants, integrate the management of different wastewater programs, and in turn, reduce the amount of pollutants being released in to the environment through this approach.

Because there were several comments submitted, the comments topics were generally combined and the following is in response to one or a combination of comments:

One comment indicated that this project would allow deregulation of significant industrial users (SIUs). MSD s project XL does not involve deregulation, but rather, the increased regulation of those users that have the greatest potential to impact the treatment

plant and thus the Chenoweth Run receiving stream. Current regulations only require minimal monitoring and inspection of users defined as SIUs. Under this project, more will be required of industries which are determined to be SIUs. Also, MSD will monitor and inspect the SIUs much more frequently than is presently required. Any industrial user which is determined by MSD to not be significant would have to meet the compliance screening criteria described in the FPA and would still be subject to certain requirements (also described in the FPA), including reporting and reinvesting a percentage of saved monies in a stakeholder-approved environmental program.

One commentor suggested that the FPA was developed without Stakeholder consultation. As EPA considers stakeholder involvement to be essential to the XL process, MSD has engaged the stakeholders at every stage of this project. The role of the stakeholder is to provide input to the development of the FPA so that individual, group and community goals can be considered. Consequently, MSD developed a list of potential stakeholders to the XL project prior to submitting the XL proposal to EPA. The list, found in Appendix B of the FPA, includes groups and individuals from the residential, industrial, regulatory and environmental community in and around the Jeffersontown sewershed. MSD then hired a convenor to assist in determining stakeholder issues and to ensure that all interested parties would have an opportunity to be a stakeholder. Subsequently, MSD conducted a series of quarterly stakeholder meetings throughout project development. For each meeting, agendas were sent out to the list of stakeholders in Appendix B in advance of meetings and meeting summaries were distributed and posted on the internet. During one of these meetings, and in follow up letters to all stakeholders, MSD invited interested stakeholders to participate in a work group to advise MSD during the development of the FPA. This work group, comprised in part of stakeholders, played a key role in providing input into the re-designed pretreatment program, including the criteria for identifying pollutants of concern and the compliance screening criteria for industry. MSD has documented its past and future stakeholder participation plans in Appendix D of the FPA and, as stated in the FPA, will involve the stakeholders throughout the duration of the XL project.

One commenter questioned the validity of the system-wide sampling data collected and analyzed by MSD. MSD collected wastewater samples every fifteen (15) minutes at strategic points through out its Jeffersontown sewershed. The fifteen (15) minute sample aliquots were composited over a twenty four (24) hour period and then analyzed to provide a daily value. MSD reported the data in both daily and weekly average values. The data used by MSD and the stakeholders as the basis for decision making in the project was collected and analyzed in accordance with 40 Code of Federal Regulations (CFR) Part 136, EPA s *Guidelines Establishing Testing Procedures for the Analysis of Pollutants*. This is a requirement of 40 CFR 403 (the General Pretreatment Regulations), the approved pretreatment program and the National Pollutant Dsicharge Elimination

System (NPDES) permit which is not eligible for regulatory flexibility in this project. Moreover, although MSD s previous sampling in this watershed consisted only of the required industrial user discharges, WWTP influent and effluent and sludge, with this XL project, MSD has designed a new and more expansive sampling plan which also includes collection system sampling and stream sampling. Furthermore, MSD conducts stream monitoring that is above and beyond the regulatory requirements (see discussion below). MSD is confident that the data, collected and evaluated with standard scientific and engineering practices, is and will continue to be representative of the wastewater characteristics within the watershed.

One commenter had general concerns regarding stream monitoring and how this project will improve stream quality in Chenoweth Run. Although not required, MSD collects data from Chenoweth Run from a variety of sources.

There are two monitoring stations on Chenoweth Run. The first site, at Gelhaus Lane, has been in existence for about twelve (12) years. Data at that location has been collected by MSD personnel approximately every six weeks and analyzed quarterly for approximately thirty (30) parameters including flow, pH, conductivity, temperature, alkalinity, solids, nutrients, etc. with metals and pesticides. In 1999, mini monitors and stream gauges were installed at the Gelhaus Lane monitoring site and also at a new location on Chenoweth Run at Ruckreigle Parkway. Data is automatically collected at these sites every fifteen (15) minutes, twenty-four (24) hour per day, three hundred sixty five (365) days per year while stream stage is collected at each site every five minutes, twenty-four (24) hours per day, three hundred sixty five (365) days per year. Data collected includes pH, specific conductance, temperature, dissolved oxygen and dissolved oxygen saturation. Stream stage is converted to discharge volume by "rating" the site (measuring flow over a variety of stages and then calculating the relationship between these via linear regression). Also, MSD has collected data on three hundred nineteen (319) stormwater outfalls on Chenoweth Run.

In addition to MSD monitoring efforts, the United States Geological Society did a very general Hydrological Simulation Program - Fortran model in the late 1990s and the KYDEP Division of Water (KDOW) conducted a limited Total Maximum Daily Load (TMDL) study of Chenoweth Run for phosphorus in the mid 1990s. This TMDL did not identify sources/loads of other pollutants, particularly within the non-point source sector. One of the KDOW recommendations - phosphorus removal is scheduled to be implemented at MSD s Jeffersontown WWTP.

MSD s Project XL baseline data collection efforts added monitoring events upstream and downstream of the Jeffersontown WWTP treatment plant in 1999. Samples

from this additional monitoring have been collected quarterly from industrial users, the collection system, and the treatment plant influent, effluent and biosolids.

MSD implemented a new Laboratory Information System (LIMS) in May of this year. All laboratory analyses performed by MSD are now being entered into this centralized database. MSD is also now mapping all monitoring locations in the Louisville/Jefferson County Information Consortium geographic information system to facilitate future research and the development, implementation and evaluation of water quality protection and restoration programs. MSD hopes to enable public internet-based queries to the LIMS database within the next couple of years.

MSD plans to continue with the current stream monitoring efforts and, if the project data dictates (per the Prioritization Strategy described in the FPA), resources may be shifted from the industrial sources to be used in the reduction of commercial/residential and/or non-point pollutant sources. If non-point source controls are pursued, even more stream monitoring may be conducted.

Superior Environmental Performance for this project is defined in the FPA. The changes in the pretreatment program under this project do afford a higher level of protection to Chenoweth Run than is the case with the existing national pretreatment program. One very tangible goal of this project is the reduction of the pounds of pollutants of concern discharged to Chenoweth Run Monitoring under XL is performed to calculate mass loading of pollutants, industrial users are to be targeted according to the risk they actually present to the treatment plant and the stream, and resources, when available, can be re-allocated to address non-industrial discharge sources of pollutants and other water quality issues. Prior to this project, pollutants of concern were not a specific consideration of the pretreatment program

One comment states that laboratory data generated during this project has not been made available to the public. Although comments indicated that the data provided by MSD is incomprehensible, raw data is often difficult to interpret for the average stakeholder. Consequently, as part of the FPA development, MSD has provided data summaries to interested stakeholders. MSD will continue to summarize its data in a format which the average stakeholder can comprehend. MSD has not received a formal Open Records Request for any of the raw data. The amount of data collected has generated volumes of paper, however, MSD will provide raw data to those interested stakeholders upon submittal of a specific written request pursuant to Kentucky Revised Statute Chapter 61.

One comment questioned the costs/net benefit of this project. The intention of this project is to maximize the efficient use of resources in a way that allows the greatest net benefit. For instance, MSD has incurred additional expense to conduct the baseline sampling and flow monitoring. However, that cost is determined to be money well spent because it provides data that allows better environmental protection. Also, some of the cost will be covered by a grant that MSD received from EPA for the development of Pretreatment Performance Measures.

Some comments implied that MSD would be autonomous in its redesign and implementation of the pretreatment program. Project XL does not provide facilities autonomy in the implementation of the project. Rather, the FPA requires written and oral reporting of the stages of implementation. In addition, the FPA sets forth the criteria which will be used by MSD to implement the program. Included are criteria to be used in the determination of pollutants of concern and compliance screening. EPA and KYDOW will oversee MSD s implementation of this project by reviewing MSD s written progress reports, conducting on-site evaluations and face-to-face meetings. The legal implementation mechanism for this project, the approved pretreatment program and NPDES permit, will contain the flexibility MSD needs to implement this project. The modifications to the approved pretreatment program and NPDES permit will adhere to the public participation requirements of the NPDES regulations.

Furthermore, categorical pretreatment standards are not being waived by this project. Any industry which meets the descriptive criteria of a categorical standard applicability is still required to comply with the categorical standards to which it is subject. Any local limits set by MSD will be based on technically sound data and are still subject to review and approval by KYDOW.

One commenter suggested that the project should encourage industries to eliminate their wastewater discharge and explore opportunities for reduction, reuse, and recycle of waste. Pollution prevention is synonymous with source reduction. Pollution prevention focuses on industrial and organizational processes that generate waste. Within these processes, waste generation is minimized rather than controlled after its production. Pollution prevention includes materials substitution, process changes, in-process recycling, quality control and other activities that minimize waste production. This project will promote pollution prevention and allow the industries to focus their pollution prevention efforts on pollutants that have the greatest potential to impact the stream.

Additional comments were made regarding a wastewater treatment plant which is outside the scope of this XL project. Public perspectives on these and other

environmental issues are important to the Agency and comments are appreciated. We wish to thank all commenters for showing their concern for the natural environment in the MSD area by raising these issues. We invite you to continue to participate in the development and negotiation of this XL Project, and to submit further comments related to other operations in another forum, as appropriate.