

OHIO RIVER VALLEY WATER SANITATION COMMISSION

**Roundtable Conference of Commissioners
Hilton Cincinnati Airport
Florence, Kentucky
Wednesday, February 10, 2010
1:30 – 4:30 PM**

Session I: 1:30 – 3:30 P.M.

Publicly Owned Treatment Works and Ohio River Water Quality

Reports to the Commission from Three POTW Utilities and the President of the Water Environment Federation (WEF) – Issues, Stressors, Opportunities

Summary of Discussions

Commission Chairman Jeff Eger of Northern Kentucky Sanitation District #1 welcomed all to the roundtable session. He provided a briefing on the significance of the topic to the wastewater industry; his concern for the billions of dollars that will be spent in the design, construction and operation of storm water control systems, the resulting benefit to the Ohio River and the coordination that needs to take place between Northern Kentucky S D #1 and Cincinnati MSD. He encouraged open discussion following the presentations on the regulatory issues and the role the Commission may play in assuring the application of good science in the control of storm water discharges to the Ohio River. Mr. Eger then put a historical context to the issue through newspaper clippings that appeared in Cincinnati in 1953, extolling the completion and dedication of the Kenton and Campbell county \$7.6M treatment plant in Bromley, KY. The dedication was to be attended by more than 350 Ohio River city mayors, and state and national dignitaries.

Mr. Eger then introduced Mr. Tony Parrott, Director of the Metropolitan Sewer District of Greater Cincinnati.

Mr. Parrott's presentation is attached. His presentation identified the building blocks of the consent order, i.e., opportunity, flexibility and affordability, an implementation schedule that represents a phased approach, which results in enhanced affordability, and the need to balance the increasing sewerage service costs with declining sewerage collection system usage. Mr. Parrott stated that competing infrastructure needs should evolve into the development of an integrated infrastructure approach; and that innovative approaches will result in sustainable development, citing that every \$1 spent in infrastructure development can result in \$6.35 for the local economy, and that every job created rebuilding infrastructure creates over 3.6 additional jobs. Mr. Parrot concluded his remarks identifying 5 specific needs: 1) Recognition of affordability constraints on communities addressing Consent Decrees, 2) Partner with utilities in developing a strategy for managing watershed issues, 3) Water quality & quantity solutions must be integrated, 4) ORSANCO efforts in developing policy guidance and influencing the Clean Water Act, and, 5) Supporting lobbying efforts for maximizing federal funding.

Questions regarding green infrastructure development were raised. Mr. Parrot stated that a 10 million gallon offload from the system was the threshold for qualifying as a "green" approach. Jeff Eger followed, identifying the green approach they have used in innovative storm water controls recently implemented at St. Elizabeth Hospital's facility along I-75.

The issue of affordability of CSO controls was asked. Mr. Parrott indicated they had projected annual costs of \$900 - \$1200, while Mr. Eger stated they would be approaching the 2% per household cost figure. Regarding costs, Mr. Parrott cautioned that increases have to be undertaken carefully and be mindful of the burden this can place on industry and their ability/willingness to pay for such improvements in difficult economic times.

The question of the impact CSO improvements will have on tributary recreational use was also asked. Mr. Parrott stated that Cincinnati MSD will have tributary bacteria data posted on their website to assist in recreational use determination.

Mr. Eger thanked Mr. Parrott for his presentation and introduced the next speaker, Paul Freedman, President of LimnoTech.

Paul opened his comments with a historic perspective on the environmental regulatory industry, recounting the progress that has been made in water pollution control. While his perspective focused on water quality problems and progress in Lake Erie and the Cuyahoga River, he did emphatically note that at no time has the Ohio River ever caught on fire. He noted the significant and highly observable improvements that had been made in environmental quality between the 70's and 90's, but commented on the slowness with which it has proceeded in the 90's through today. The 90's however also represented a time of change; a change in focus, from end of pipe to non-point source, and a change in the intellectual environmental paradigm.

He questioned the efficacy of TMDLs, given that 90% of waters are impaired by non-point source contributions; and 40% of waters are impaired by only non-point source contributions; and that 10% of waters are impaired only by point sources; is the TMDL program a help or a hindrance to water quality improvement programs?

Today, the situation is different; mercury is both a legacy and a contemporary issue with vectors found in both water and air; new methods of mercury control/monitoring/modeling, etc., must address the multimedia contributions and pathways of this contaminant.

We have begun to acknowledge that we have more societal choices: what to add to foods, personal care products, etc., and their physiological and environmental fate as evidenced by recent reports documenting the presence of personal care products, prescription drugs, antibiotics, etc., in surface waters of the US.

The hypoxic zone in the Gulf of Mexico is an example of societal and regulatory choice. 70 – 80% of nutrients in the Gulf are agricultural in origin. Agricultural sales track with the size of the hypoxic zone; as such, it is a consequence of the increase in agricultural production in the United States. But, the problem is not being addressed holistically. Billions will be spent on sewer/sewage controls with little to nothing being spent on agricultural controls. While USEPA recognizes this issue and problem, they are still using 1970's vintage tools to solve a 1990's issue, not unlike trying to use your 1970 Chilton's car repair manual to fix your 2000 model year car problem...can't be done.

Not since the 1960's, has water had such a high profile nationally. Drought, floods and water availability issues have all contributed to the recent publication of numerous books on water. The time and economy are right for the focus on holistic water resource and water quality management. There is a push for a national water policy with multi-federal agency integration a key component. However, this will have to be embraced through an adaptive management approach.

The value and holistic management of water will need to be integrated into the culture of our cities; integrating and balancing drinking water availability and quality with wastewater quality; identifying the impacts and benefits to city economies, benefits of green practices and the inherent connection to the quality of life. Educating the public as to the cost benefits and goals and how these equate to personal benefits and goals is essential. There is also a need to push USEPA and other federal agencies to work in concert with each other to develop and focus on holistic goals and not merely their agency-centric parochial interests and mandates.

We have arrived at another point in time where there needs to be a call to action. This call will be different in that it will be a call to change the existing environmental control/environmental management paradigm to address today's issues better, more holistically. It will, in fact, be the same kind of change that occurred in the 60's that served to get us to where we are today, but it will engender a different approach to achieve the same level of success.

Mr. Freedman concluded his remarks and responded to several questions.

One question addressed the need to open the Clean Water Act to remove limitation in authority over non-point sources and agricultural related contaminants. Mr. Freedman responded by saying such controls would need to be established in parallel with the opening of the CWA and that future environmental improvement programs must have multiple purposes; issuing corn field-specific NPDES permits is not the answer. Mr. Vicory concurred stating that the sentiment in Washington is that the CWA does need to be re-evaluated and that such action needs to be approached jointly with non-point source and agricultural associated water quality issues. Mr. Freedman further added that each industry sector must now do its part as 80% of all water withdrawals are attributable to two industry sectors: agricultural application and energy production.

Mr. Wayland commented that environmental issues and water quality problems were bigger and more noticeable in the 70's; today's problems are less noticeable, more subtle and, therefore, harder to rally around. In addition, partisan politics is a significant impediment to progress.

Mr. Freedman responded stating that a commonality must be found that will meet multiple, if not all societal needs; energy, cities, agri-business, etc. He stated that drip irrigation uses 50% less water than broadcast methods. A paradigm shift needs to occur that results in the understanding, appreciation and adoption of such technologies based on their environmental benefit.

Mr. Eger thanked Mr. Freedman for his presentation. He next introduced Mr. John Lyons, Director of Operations for Strand Associates.

Mr. Lyons presentation provided a unique perspective on the difficulties small communities have in complying with USEPA's CSO Policy and consent orders.

Mr. Lyons noted that implementation of the CSO Policy seems to have transitioned to an Enforcement-based program at USEPA. Many small communities, while willing, struggle to comply with the seemingly moving targets USEPA enforcement personnel have placed on this mandated program. Most CSO communities only ask that the interpretation of the CSO Policy be fair, reasonable and realistic. Key issues that confront and perplex small community compliance efforts include:

- “Small community considerations” within the CSO Policy provide relief for small CSO communities (less than 75,000 population).
 - The CSO Policy states that communities of less than 75,000 may not need to complete all 9 elements of a traditional LTCP.
- USEPA enforcement personnel have developed their own interpretation of this exemption which, in many cases, appears to be contradictory at best. One interpretation that has been put forward is that every LTCP must contain all 9 elements. It is only the degree of detail in each of the 9 elements that varies based on community size.
- Presumptive or Demonstration Approaches
 - The federal Policy provides for two approaches for CSO control: Presumptive and Demonstrative.
 - Under the Presumptive approach, the Policy allows for four to six untreated discharges per year, on average, at each CSO location. Under the Demonstrative approach, computer modeling or other tools are used to predict the impacts of CSOs on water bodies. Depending on the results, zero or more than six untreated discharges may be allowed at each CSO location.
 - With regard to the Presumptive approach, recent discussions with USEPA enforcement staff seems to indicate that the EPA is reluctant to approve plans proposing to use the Presumptive Approach to achieve compliance. CSO communities are concerned with this development.
- 85% Reduction Criteria
 - Criteria for the Presumption Approach in the CSO Policy includes “the elimination or capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events...” .
 - Concerns are raised when a small community’s proposed LTCP demonstrating a 92% reduction in CSO is met with skepticism by the reviewing regulatory agency. The preliminary response is that additional levels of control may be required. There does not appear to be any sound basis for the hesitation in regulatory approval other than the potential to force the community to spend more money.
- Cost Benefit and Affordability Analysis
 - The CSO Policy provides for a cost benefit and affordability analysis using the “knee of the curve” as a consideration in selecting CSO controls.
 - There is concern that the use of the knee of the curve reference point is becoming much less of a consideration in current LTCP efforts and EPA is more focused on how much money a community can afford to spend, regardless of the benefit that is achieved in terms of improved water quality.

Mr. Lyons identified several inconsistencies between what is provided for and specifically articulated in the Policy versus the implementation being allowed by EPA enforcement personnel. The inconsistencies result in additional time and effort expended by both consultants and municipalities in their attempts to comply with the Policy. In conclusion, Mr. Lyons stated that the CSO Policy was developed with municipal interests at the table. The Policy clearly defines roles and responsibilities of both the CSO communities and the regulatory agencies. However, it seems that lately, the regulatory agencies have been reluctant to perform their duties under the Policy (e.g. review of water quality standards) and at times are interpreting provisions in the Policy in a more stringent and less community friendly manner than was originally intended by the authors of the Policy.

Mr. Lyons reiterated that the CSO communities that he represents are willing to aggressively move forward with the development and implementation of LTCP's, consistent with the CSO Policy. However, if the regulatory agencies leading these efforts would strive to be fair, reasonable and realistic in their interpretation of the Policy, progress toward CSO control could be achieved more quickly.

Mr. Eger thanked Mr. Lyons for his presentation and introduced the final panel member, Mr. Brandon Vatter of Sanitation District #1.

Mr. Vatter spoke to the efforts that SD #1 has undertaken to characterize the storm water dynamics in their watershed and designing appropriate management control systems. Undertaking the watershed control/management approach to CSO mitigation may be substantially more systematically effective and cost effective than implementing control strategies after the water has made its way into the collection system. With respect to storm water, water quantity and quality go together; management of one generally has a significant impact on the management of the other. Therefore, why focus the efforts on in-pipe management scenarios when out of pipe management is more beneficial? Given its position and interstate focus, ORSANCO is in an enviable position to champion the implementation of watershed-based approaches to storm water management and CSO abatement. They are also in a position to bring together systems on both sides of the river to achieve a more holistic approach to the control of storm water entering the Ohio River.

Mr. Vatter opened the floor for questions.

Mr. Schwartz suggested that one message that could be sent to USEPA on this issue would be that once the knee of the curve has been met, money would be better spent on out of pipe issues. This would be highly beneficial as the current regulatory process does not allow for the expenditure of water and sewer infrastructure funds for the control of non-point source contributions.

The question was asked regarding the role of wet weather standards in CSO abatement. Mr. Lyons responded stating that the Ohio River and tributaries will not meet wet weather standards even after the expenditure of billions of dollars on CSO abatement programs. The process must have a defined endpoint, but must also have an "off the hook" clause to acknowledge the pollutant contributions from non-sewered and non-point sources that will continue to contribute to Ohio River and tributary water quality violations even after all CSO controls have been put in place.

The question was then asked about what the reasonable expectation should be for wet weather water quality standards?

Mr. Vicory responded stating that some level of practicality must guide the development and enforcement of wet weather standards, and that the Commission has always, and proudly so, approached such issues from a very practical perspective. To wit: the Commission adopted the requirement for secondary sewage treatment in 1970, two years before the passage of the Clean Water Act; the Commission conducted a filter backwash study in conjunction with drinking water utilities to conclude that filter backwash did not represent a pollution issue to the Ohio River (USEPA policy does require treatment of filter backwash, but does not consider impacts to a system the size of the Ohio); on blending, the Commission's policy is that blending provides the most/best treatment for incoming storm water as opposed to maintaining discharge standards through the treatment plant and bypassing literally everything else without treatment. It would be in this same manner and conscious practicality the Commission would develop and enforce wet weather standards in light of CSO abatement efforts.

Mr. Eger thanked all the panel participants and brought the session to a close.

Session II 3:30 – 4:00 PM

Review and Discussion of Memorandum of Understanding between ORSANCO and Ohio River Basin Water Resource Association

The next session of the Round Table focused on the Memorandum of Understanding that currently exists between the Ohio River Basin Water Resource Association and ORSANCO.

Mr. Vicory opened the discussion framing the circumstances under which the Memorandum was developed and entered into by both parties. The topic of this session was the renewal of the Memorandum and the value of doing so to both organizations.

Mr. Fezell commented on how impressed he was with the level of discussion and interaction that had occurred between the states on some very difficult issues during the course of the Technical Committee meetings.

He mentioned that he had asked his board members to identify cross-cutting issues that may exist between the water quality and water resource agencies, and was awaiting their reply. He also mentioned that, at present, ORBWRA was financially self sustaining.

Mr. Fezell then turned his comments toward the Ohio River Summit meetings that had been convened by the US Army Corps of Engineers for the purpose of identifying or creating a holistic water resource management entity for the Ohio River Basin. Larry commented that the initial meeting had been held in 2007 and that no one cohesive issue had been identified that all participants could identify with. He viewed the recently formed Ohio River Congressional Caucus as exceedingly important to the progress of such an initiative and felt the combination of the Caucus and Summit would, ultimately, be highly beneficial to the establishment of such a basin-wide water resource entity.

Mr. Fezell concluded his remarks by stating he looked forward to a continued working relationship with ORSANCO, and would continue to work with his board members to bring their identified issues before the Commission in June.

The question was raised about the issues discussed during the course of the Summit meetings and if these would provide a basis for collaboration between ORSANCO, ORBWRA or any of the other organizations in attendance. Mr. Vicory responded stating that, during the course of discussions at the October Summit meeting, infrastructure needs for water resources and sustainability were the two primary issues discussed. No discussion was held regarding the mechanics of collaboration.

The question was asked regarding what were the Summit issues. Mr. Vicory again responded stating that he wasn't exactly certain, other than the assertion that one voice should be identified to speak to and for water resource issues in the basin.

Mr. Fezell commented that minutes from the Summit meetings repeatedly identified ORBWRA as the logical organization to serve in this capacity. He stated that he had repeatedly commented that he did not agree with this assessment but did agree that having one organization spearhead the process is key to bringing all levels of groups together, and that the Caucus would be an excellent vehicle for securing funding.

Mr. Bruny asked if any members of the Caucus had been invited or involved in the Summit meetings. Mr. Feazell indicated that Congressman Driehaus had been invited to speak, but had declined. No other Caucus members or representatives had participated.

Mr. Sovic (with support from Mr. Duritsa) expressed frustration over the Summit meetings stating that facilitators seemed to ignore the existence of ORSANCO and the availability of its current infrastructure that is well suited for this task. In addition, he did not feel that the summary of discussions (drafted by the Corps) from the summit meetings represented the discussions that actually took place during the course of the meeting.

Mr. Feazell stated that it is the function of the Corps to promote their water resource agenda in the Ohio River basin. Regarding ORSANCO absorbing ORBWRA in toto, their board had mixed reactions to this as they desire a forum in which they could continue their dialogues on basin-wide water resource issues.

Mr. Sovic asked if either a memorandum of agreement between the Governors could be used or if the existing Commission Compact could be modified to include Water Resource Management responsibilities.

Mr. Flannery asked where the Commission wanted to go from here on this issue. Water resource management has become a major environmental management issue, i.e., West Virginia is evaluating the need for water withdrawal laws; Las Vegas is looking for water and evaluating diversion projects from other water rich areas; Atlanta is in need of water, etc. How big of bite does the Commission want to take and how far do we want to go with this issue? Several issues had been identified that would need to be vetted for ORSANCO to move forward on this issue.

Mr. Eger closed the session thanking all members for the presentations, comments, insights and participation.