

OHIO RIVER VALLEY WATER SANITATION COMMISSION

MINUTES

**201st Meeting of the Technical Committee
Embassy Suites RiverCenter
Covington, Kentucky
February 12-13, 2013**

Chairman Toby Frevert, Presiding

(Note: Power Point presentations from this meeting can be found on the ORSANCO website: www.orsanco.org)

Call to Order

The 201st meeting of the ORSANCO Technical Committee was called to order by Chairman Frevert at 1:00 pm EST on Tuesday, February 12, 2013. Seven states, three federal agencies and three Commission advisory committees were represented. (For Roster of Attendance, see page 15.)

Minutes of 200th Committee Meeting

ACTION: Motion passed to accept the minutes of the 200th Technical Committee meeting.

Chief Engineer's Report

Mr. Tennant reported on a number of items:

Spill Reporting – Language has been inserted into the Coast Guard appropriation bill which would result in ORSANCO being able to receive complete spill information from the National Response Center.

Cincinnati Consent Decree – Mr. Tennant remarked that ORSANCO is party to a federal consent decree regarding the City of Cincinnati's wet weather improvement plan, which Mr. Elmaraghy will discuss in more detail later on the agenda.

Toxics Release Inventory Data – The USEPA recently released updated TRI data. This data is used by environmental groups to rank the most polluted streams in the nation which is published in a report. The Ohio River has historically been ranked number one in the nation for receiving the greatest amount of toxic pollution. The Commission typically receives a number of press inquiries after the release of the report. In order to respond to inquiries, staff has been evaluating the data. The number one ranking results from a couple of discharges of nitrate compounds which are not toxic and the river meets all of its water quality objectives regarding these compounds.

Ohio River SWEEP – The 24th annual Ohio River SWEEP will take place this year on June 15, 2013.

Water Resources Update

Staff continues to work on a series of studies to 1) evaluate current and future water management issues, 2) review the existing laws and regulations in place which govern water resources in the Basin, and 3) to ultimately define the desired role for ORSANCO in addressing water quantity issues. Two draft reports are nearly completed and will be distributed to the Water Resources Committee for review at the next committee meeting in April. The first report characterizes water use in the basin from 1955 to 2005. The second report is an inventory of state and federal laws and regulations pertaining to water management in the basin.

Efforts are underway to compile information to characterize and evaluate potential water resource impacts from interbasin transfers, shale gas development, and climate change. Reports will be prepared for each of these topics in 2013.

Total Dissolved Solids Project

Sam Dinkins provided an update on the Ohio River Users Program study to characterize dissolved solids concentrations in the Ohio River and select tributaries. Weekly sampling was conducted from December 2011 to December 2012 at 11 mainstem locations on five tributaries (Allegheny, Monongahela, Beaver, Muskingum, and Big Sandy Rivers). The highest TDS concentrations were observed on the Muskingum and Big Sandy Rivers with peak levels of 584 mg/L and 579 mg/L, respectively. TDS concentrations in the Ohio River did not approach the Commission's 500 mg/L standard, with the highest level observed at 368 mg/L. This is despite the unusually low-flow conditions experienced during the study period. A draft report will be completed for review at the June 2013 Technical Committee meeting.

Report of the NPDES Subcommittee

The subcommittee met twice by conference call to address three issues, including: 1) permit development for criteria that apply at downstream intakes, 2) coordinating and streamlining ORSANCO's variance process, and 3) review of discharges potentially needing variances regarding their discharge of mercury.

Regarding permit development for criteria that apply at downstream intakes which includes TDS and ammonia, the subcommittee recommends a two-tiered approach in which states continue to renew permits using their existing methodologies for existing discharges where no problem exists at downstream intakes. Regarding new discharges or existing discharges where a problem exists at downstream intakes, development of an interstate approach is necessary which the subcommittee will be working on.

Indiana and Ohio both have streamlined variance processes regarding the mixing zone prohibition for discharges of mercury. These streamlined processes are granted to lower concentration mercury discharges that can't meet standards without a mixing zone and they have certain requirements such as implementation of pollutant minimization plans. Staff will be working with IDEM and OEPA to develop a similar streamlined, coordinated approach.

Staff compiled a list of Ohio River mercury discharges with discharge data from USEPA's discharge database (ICIS). There were fifty-six discharges with mercury discharges above the Commission's water quality criterion which might indicate a potential future need for a

variance. However, there can be problems with the data and a single value above the criterion does not necessarily indicate the need for a variance, so the actual set of discharges potentially needing a variance in the future would be smaller than the fifty six identified discharges. The list indicates a potential workload for ORSANCO staff in processing future variance requests.

Pollution Control Standards

A draft variance application and review process was developed and followed for the PPG variance request, and it was agreed that the process would be considered for adoption subsequent to an evaluation of the process after completion of the PPG evaluation. At its previous meeting, TEC requested that the process be coordinated with IDEM's and OEPA's streamlined mercury variance processes which have already been approved by USEPA Region 5. Chairman Frevert indicated that the Pollution Control Standards Committee is seeking any guidance that the Technical Committee might have to offer before advancing the current draft to the Commission for consideration.

ACTION: Motion passed to support Commission adoption of the current draft Variance Application and Review Process, subject to future modifications necessary to coordinate the process with states' streamlined processes.

Also discussed were the merits of states issuing compliance schedules within permits or issuing enforcement orders in lieu of ORSANCO's variance process, particularly to address requests received in the short-term, and how these alternatives could be accepted by the Commission. Staff was directed to address this issue for the June Commission meeting.

Regarding the recently adopted TDS criterion of 500 mg/L in the 2011 standards revision, there is a commitment to conduct a reevaluation of that criterion subsequent to completion of the TDS study. Results of the TDS study will be presented at the June Technical Committee meeting.

Regarding the recently adopted human health temperature criterion of 110 deg. F in the 2012 standards revision, the power industry has significant concerns. Mr. Reash indicated that the Power Industry Advisory Committee does not support the current criterion, but they supported the original proposal of 116 deg. F recommended by the ORSANCO temperature workgroup. He indicated that implementation language also is needed which could be modeled after Wisconsin DNR's implementation language. TEC directed the Power Industry Advisory Committee to work with the NPDES Subcommittee on a proposal for implementation language.

The next triennial review of the standards is scheduled to begin in Spring, 2014 with solicitation of initial public input, followed by development of specific proposed revisions with public webinars and a formal hearing around June 2015, and final adoption at the October 2015 Commission meeting.

EPRI Methyl Mercury Modeling Project

Mr. Reed Harris reported on an EPRI mercury modeling study to identify the important sources of mercury and to relate those loadings to resulting mercury concentrations in aquatic biota for the RC Byrd and Racine pools of the Ohio River. Preliminary conclusions of the

study include: Fish mercury levels are low to moderate as compared to elsewhere in North America; the model reasonably predicts mercury in the water and food web; most of the mercury load in the RC Byrd pool is from upstream sources; mercury methylation in the RC Byrd pool is more important as a source to sediment and possibly benthic biota. Additional questions to be investigated include how far upstream is the methylmercury load to the RC Byrd pool produced, and what is the role of fish growth rates, trophic levels and what is the effect of mussels. Mr. Reash remarked that the most important areas lacking data include mercury in sediments and methylmercury in water.

Report of the Biological Water Quality Subcommittee

Mr. John Wirts with West Virginia DEP, and newly appointed chair of ORSANCO's BWQSC, presented an overview of the annual meeting of the subcommittee which was held at ORSANCO on December 3-4, 2012. A major topic of the meeting, presented by Mr. Wirts, was the assessment of the Aquatic Life Use in four Ohio River pools. Biologists reported extremely low flow conditions in all four pool surveys as evidenced by modeled flow data as well as record numbers of gizzard shad river wide. Flow conditions closely matched those of the last assessments of the four pools in 2007 enabling more direct comparisons between the two survey periods. As in 2007, all four pools surveyed in July and August 2007 (Emsworth, Pike Island, Meldahl, and Newburgh) were determined to meet their aquatic life use designations as evidenced by the recorded fish community surveys. However, the condition ratings of three of the pools each dropped one category between the 2007 and 2012 surveys (Emsworth - 'Good' to 'Fair'; Pike Island - 'Very Good' to 'Good'; and Meldahl - 'Very Good' to 'Good'). Newburgh remained stable as one of the best scoring pools in the river ('Very Good'). The drop in the Meldahl survey can likely be attributed to the fact that one of the 15 probabilistic sites was located in a thermally-influenced area and scored very low, bringing down the overall score of the pool just enough to change a condition rating. The decreased ratings of Emsworth and Pike Island, however, continues a trend of decreasing overall ratings for pools in the upper river between the first round of assessments (2005-2009) and the second (2009-2012). These declines could in part be attributed to an infestation of an exotic aquatic plant (*Hydrilla verticillata*), but could also be due to upstream habitat alteration (instream and riparian) and water quality degradation.

ORSANCO biologists utilized unused 106 funds to contract with Lewis Environmental Consulting to conduct a mussel survey of the Newburgh pool at each of the 15 probabilistic fish survey sites using a modified Ohio River protocol. A total of 626 live individuals from 22 species (~73% of known fauna from the pool) were encountered, including one record of a federally endangered Sheepsnose Mussel. It is anticipated that these data, and any future surveys may be used to explore the use of mussels as an additional biological indicator for aquatic life use assessments.

ORSANCO staff presented updated information regarding the NRSA program. To address basin states' concerns that results of the 2008-2009 NRSA may lead to confusion among the general public due to potentially conflicting information, staff consulted with USEPA representatives. These discussions seemed to indicate that confusion would be minimal, if not non-existent for several reasons. First, NRSA assessments will not be to the state or waterbody scale, as state assessments often are, making direct comparisons impossible. Second, NRSA assigns condition ratings to streams and does not list streams as being "impaired". Lastly, in the NRSA, streams in any given state are compared to ecoregional reference condition which may cause assessed streams within that state to appear to be in

poorer condition than comparisons to state reference streams. ORSANCO biologists continue to pursue an assessment of the Ohio River basin using the 2008-2009 NRSA data, but this task may be more complicated than originally anticipated. Multi-metric indices (MMIs) created for the national and ecoregional assessments cannot be used directly in regional assessments due to uneven weights assigned to sites used in the assessments. USEPA Regions I, II, and III, however, are developing a method for developing regional MMIs which could be used as a template for moving forward with Ohio River basin assessments. This template may be available in the fall of 2013.

Recommendations of the Biological Water Quality Subcommittee included accepting all four assessment units to be in passing condition, continuing to validate the responsiveness of the newly created macroinvertebrate index before incorporating it into 305(b) assessments, continue with plans to participate in USEPA's NRSA surveys, and to plan on conducting 2013 assessments in at least 3 pools (Dashields, Hannibal, Smithland, and, if resources allow, RC Byrd).

Source Water Protection and Emergency Response Programs

Upper River Ohio River Focus Group Meeting January 23, 2013

The January meeting of the Upper Ohio River Focus Group was convened at 11:00 am by consensus of the participants. This group has been meeting for the past 13 years to discuss water quality issues on the Ohio-West Virginia border section of the Ohio River. The agenda was distributed and comments and additions were requested. There were 15 people in attendance representing two states, Ohio and West Virginia; USEPA (3 offices); US Army and ORSANCO. The meeting was held at the US Fish and Wildlife Service Ohio River Islands National Wildlife Refuge office in Waverly, West Virginia.

The first presentation was provided by SFC Douglas L. Melvin of the Army 52nd Civil Support Team. SFC Melvin provided an overview of the contaminant plume modeling capabilities of the Civil Support Team which primarily addressed air release scenarios. The CST uses the IC Water model for river or water based contaminant plume modeling, but finds it quite cumbersome to operate. SFC Melvin reaffirmed the CSTs offer to assist should their capabilities ever be needed during a spill event.

Bill Huggins provided an overview of ArcGIS Viewer for Flex. Viewer for Flex provides the opportunity to access, incorporate and display geo-referenced web-based data. Other ArcGIS applications require local data to reside on a local hard drive or server, where the Viewer for Flex is designed to access information via the internet. As such, this could prove to be a powerful tool in the focus groups effort to complete the Ohio River outfall survey and as the platform for the Pike Island comprehensive GIS. Efforts will be undertaken to evaluate the structure of the Ohio and West Virginia state NPDES files to determine the best data structure for this application.

Reggie McIntyre, USEPA CID, gave a presentation on a recent case she worked wherein a contractor had placed stone/gravel/cobble down the middle of a creek bed to facilitate access to resources on the opposite side of the creek. This action constituted a violation of Section 404 of the Clean Water Act. The settlement resulted in fines of \$600k paid and the stream restored to close to original condition.

Ken Mettler, OEPA SID, reported on a hydrofracturing water discharge case wherein the responsible party built a reservoir on his property and filled it with city water to be used in hydrofracturing operations for three wells on his property. After hydrofracturing the first two wells, he placed the blow back water into the reservoir. He used a floating suction head to withdraw water to hydrofracture the last well. When he had no further use for the water, he attempted to contract with a company to pump the pond out, discharging it to natural drainage on his property. The contractor refused to provide service. The land owner then used a back hoe to remove a section of the dam to release the water. While he was successful in creating an outlet for the water, he was unsuccessful in controlling the release and the entire contents discharged quickly from the reservoir, including the bottom water which was comprised mostly of unmixed hydrofracturing wastewater. This is an unpermitted discharge of pollutant(s) to waters of the US, under the Clean Water Act, 33USC 1319(c)(2)(A), which is a federal felony.

Hydrofracturing Wastewater Barging on the Ohio River

Discussion turned to the issue of barging hydrofracturing wastewater on the Ohio River. At present, only two locations are known to be gearing up to handle hydrofracturing wastewater for barging; Apex Oil near Weirton, WV, which would serve as a collection point located at ORM 65.6, LDB, and Evergreen Environmental near New Matamoras, OH at ORM 142, RDB. The hydrofracturing wastewater will be loaded onto barges and shipped from upstream locations to the New Matamoras site where it will be offloaded and held for trucking to deep well injection sites in southeastern Ohio. However, the barging of hydrofracturing wastewater is not yet permitted as the USEPA and USCG are working on the classification of the hydrofracturing wastewater, determining if should be classified as a “hazardous material” or not. The following is from recent communications with the USCG/Sector Ohio Valley:

“The U.S. Coast Guard, in consultation with DOT's Pipeline and Hazardous Materials Safety Administration, the EPA, Argonne National Laboratory and DOE, examined the available data for composition of the shale gas extraction wastewater to develop guidance for its safe maritime transport. A draft policy letter proposes to classify shale gas extraction waste water as a cargo regulated under Title 46, Code of Federal Regulations, Part 153 (Ships Carrying Bulk Liquid, Liquefied Gas, or Compressed Gas Hazardous Materials). The policy letter also proposes additional safety requirements for the entry of personnel in tanks that contained shale gas extraction waste water.

Shale gas extraction wastewater is not a bulk cargo currently listed in the Code of Federal Regulations, so it currently cannot legally be transported upon navigable waters of the U.S. The U.S. Coast Guard, in consultation with other agencies and federal laboratories, is determining safe carriage requirements for shale gas extraction wastewater.”

Regarding the material classification stage, they are still in the fact finding mode to establish the basis for classification. Formal presentations and discussions then concluded. The next meeting of this group is scheduled for May 22nd.

First Annual Great Rivers Spills Coordination Meeting, January 28th, Metropolis, IL

The first meeting of the Great Rivers Spills Coordination group was convened January 28th in Metropolis, Illinois. This meeting, convened at the request of Mr. Robert Francis of the Kentucky Department for Environmental Protection, Environmental Response Branch, is an

effort to create a group similar to the Upper Ohio River Focus group and would encompass the lower extent of the Ohio River and portions of the Mississippi River. As such, attendance was comprised of representatives of four states, Kentucky, Illinois, Missouri and Tennessee. The US Coast Guard – Paducah, and USEPA R-7 were also in attendance. These meetings provide a unique opportunity for agency personnel to discuss operational practices and understand similarities and differences between and among the participants in an open, unstructured forum.

As this was the first meeting of this group, the agenda was very broad, with topics for discussion such as authorities, local response capabilities, reach-back capabilities, review of the USEPA Region 7 Great Rivers Sub area plan, and the topic of interstate communications strategy. ORSANCO's emergency response programs provided a proven template for the development of communications strategies on this reach of these great rivers. As with all the focus group meetings, it was a welcome opportunity for open discussion regarding each agency's activities.

A second meeting will be held in approximately four months to discuss regional MOUs, starting with those established by the US Coast Guard and the USEPA, to those that may exist between Missouri and Kentucky or Illinois. Participants seemed to enjoy the opportunity to meet in a collegial atmosphere and look forward to reconvening in the future.

ODS Renovation -- Network Upgrade

The first component of the ODS renovation, which took place three years ago, upgraded the remote communication system. This upgrade substantially expedites staff's ability to communicate with equipment at all ODS sites. From the office in Cincinnati, staff can log on to any of the ODS equipment to view data and chromatograms, diagnose or improve equipment operation, or otherwise assist operators with the proper calibration and operation of the ODS equipment. This upgrade also supports the data posting to the ODS website, a web-based ODS information system.

At present, more than half of the sites have been upgraded to new technology; most have received new gas chromatographs equipped with mass spec detectors, while others have a new generation of on-line gas chromatograph with the micro argon ionization detector, MAID. Data outputs from these analyzers is being deconstructed and programmed into an automated data retrieval, archive and web-posting system.

The visual framework for the website was presented to the committee for their review. The website will present ODS data for drinking water utilities and provide links to many river-oriented websites, i.e., stage, flow, etc. In addition, river temperature and conductivity measurements will be made available through this system from sites that have raw water taps within close proximity to the ODS equipment. At present, the renovation project is on track and within budget.

2014 305b Report

Comparison of 2012 303(d) Lists of Impaired Waters

A comparison of states' 303(d) listings for the Ohio River to ORSANCO's report were made for the purpose of identifying issues which might need to be addressed during the 2014 assessments. Differences between states' 303(d) lists and ORSANCO's 305(b) report for 2012 are as follows: PA's list is consistent with ORSANCO's report; OH does not include

the Ohio River in its 303(d) list; WV listed Ohio River segments for iron whereas ORSANCO did not list any segments as impaired for iron due to the absence of a criterion; IL, IN and KY listed certain segments for mercury whereas ORSANCO did not make an assessment for mercury in 2012.

2014 Mercury Assessment

In 2012, the river was not assessed for mercury due to the unavailability of enough data from the commonly consumed trophic levels to adequately apply USEPA's assessment methodology for determining impairment based on mercury fish tissue data as was directed by the Technical Committee. In addition, the use of mercury fish tissue data generated by other entities has been an issue which also needs to be resolved due to the effects data from certain fish species could have on an assessment. Certain species of fish are known to contain consistently lower or consistently higher concentrations of mercury, and USEPA's methodology recommends weighting data for species having more samples. Staff's recommendation was to give equal weight to all species regardless of the number of samples within any one species which would reduce the influence of having many samples from any one species. In addition, while all states indicated that they use data from outside entities, none of the mainstem states indicated that they have ever been provided or used fish tissue contaminants data from outside entities.

2014 305(b) Report Development Schedule

The 305(b) workgroup will meet during summer 2013 to agree on methodologies. Those methodologies will be presented to TEC for approval at its October 2013 meeting. A draft assessment will be completed and presented to TEC for approval at its February 2014 meeting and a final report will be considered by TEC for approval by the Commission at the June 2014 meetings.

Gulf Hypoxia Update

Staff provided an update of activities carried out by the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. The Task Force and the Coordinating Committee continue to work on actions identified at the previous Task Force Meeting in Memphis, TN as follows:

- 1) The Monitoring Collaborative is refining the list of parameters and ensuring completeness of the data.
- 2) USDA Economic Research Service is evaluating existing data to determine on the relationship between profitability and conservation practices at the farm level.
- 3) The reassessment of the Action Plan is on pace to be completed by the next Task Force meeting.

The new action plan will re-affirm the goals of the 2008 Action Plan while focusing on State Nutrient Reduction Strategies.

Additional actions were identified which will:

- 1) Increase land grant university engagement with the Hypoxia Taskforce.
- 2) Identify incentives to develop water quality trading markets.
- 3) Revamp the Federal nutrient reduction strategy.

The next Task Force meeting will be in Louisville, KY April 17-19.

Interstate Water Quality Trading Program Update

Staff provided an update of activities with the Water Quality Trading Program. All contracts between EPRI and Ohio, Kentucky and Indiana have been signed. A request for proposals was sent out to SWCD's in the selected counties. Ohio proposals are due by March 15. Kentucky and Indiana requested until May 15 to complete their proposals. It is expected that credits will be available for sale in September 2013.

The project continues to be a leader in the realm of trading programs. Both Willamette Partnership (Oregon) and Western States Trading (Snake River) are using the Trading Plan developed by this program. Two lawsuits regarding trading have been filed dealing with the Chesapeake Bay. Neither is expected to have an effect on the Ohio River Trading Project.

Status of Hydropower Development on the Ohio River

The "Policy on Dissolved Oxygen Monitoring Requirements for Ohio River Hydroelectric Power Generating Facilities" was discussed. This policy was adopted by the Commission in 1988. The Commission's primary concern with hydropower development was the potential impact on dissolved oxygen (DO) concentrations. So, in 1987, the Federal Energy Regulatory Commission (FERC) issued an environmental impact study of hydropower development on the lower Allegheny and upper Ohio Rivers. Among the study findings was that some dams were "good aerators" and some were not. For the "good aerator" dams, it was proposed that FERC licenses require maintenance of a 6.5 mg/L DO level, while a 5.0 mg/L level (the water quality standard for the main stem states) was recommended for the "poor aerators". A hydro facility does not lower the DO level directly; rather it prevents the river from receiving an input of oxygen. It is that oxygen input that needs to be preserved at critical periods (i.e., low flow, high temperature periods when DO is typically lowest). The Technical Committee therefore recommended, and the Commission adopted, a policy based on the protection of the aeration capability of each dam.

Operating licenses for Ohio River hydropower facilities should contain provisions to assure that:

- 1) Adequate studies are conducted prior to facility operation to define aeration characteristics of the dam.
- 2) Continuous monitoring of dissolved oxygen is provided at representative locations above and below the facility as appropriate, with data available to ORSANCO through remote interrogations.
- 3) Provisions are made in the facility design and operation to allow maintenance of the full aeration potential of the dam during critical conditions.

There currently are hydropower applications filed with FERC for Newburgh and Uniontown. In addition, Willow Island, Meldahl, and Smithland hydropower facilities are currently under construction. New Cumberland and Pike Island have surrendered their licenses and have stopped all construction. ORSANCO currently receives data from seven hydropower facilities and there are five we do not receive any data from. The U.S. Army Corps of Engineers has asked the districts to revise existing MOAs such that hydropower operators will be required to collect temperature and D.O. data in real time and make the data available via the web between May 1 and October 31 to help generate more data.

FY14 Program Recommendations

The following recommendations for the FY14 technical programs were endorsed by the Technical Committee, with the exception that biological monitoring of 4 pools per year be maintained:

Recommendations Resulting from NPDES Subcommittee

- 1) Continue working on the NPDES Subcommittee's proposal to address permitting of criteria that apply at intakes.
- 2) Continue to develop a streamlined ORSANCO variance review process that is coordinated with states' existing streamlined mercury variance procedures which have USEPA Region 5 approval.
- 3) Coordinate an effort between the NPDES Subcommittee and Power Industry Advisory Committee to develop implementation guidance for the human health temperature criterion.

Biological Water Quality Subcommittee Recommendations

- 4) Accept Emsworth, Pike Island, Meldahl, & Newburgh as meeting their designated Aquatic Life Use.
- 5) Validate responsiveness of newly created Macroinvertebrate index for 1-2 years before using it in 305(b) reports.
- 6) Bracket biological survey pools with continuous conductivity & temperature data loggers prior to sampling.
- 7) Continue with plans to participate in USEPA's National Rivers & Streams Assessment as planned.
- 8) To maintain data quality under current restricted budget & personnel conditions, conduct biological assessments in 3 pools in 2013 (Dashields, Hannibal, & Smithland).
- 9) Continue to pursue external funding to conduct additional mussel surveys.
- 10) Continue mussel surveys in as many pools as possible (USFWS & WVDNR offered to conduct protocol at select probabilistic sites in Hannibal Pool in 2013. Possibly Smithland Pool also.) Incorporate quantitative quadrant sampling at 2-3 sites that overlap known beds. Apply draft Mississippi River multi-metric index to data.

Monitoring Strategy Subcommittee Recommendations

- 11) Evaluate cost-benefit of reducing from bimonthly to quarterly sampling (Bimonthly/Clean Metals Monitoring Programs).
- 12) Evaluate cost-benefit of reducing number of stations versus reducing sampling frequency (Bimonthly/Clean Metals Monitoring Programs).
- 13) Evaluate current set of parameters analyzed (Bimonthly/Clean Metals Monitoring Programs).
- 14) Evaluate cost-benefit of reducing blank analyses (currently 100%) for clean metals program (Bimonthly/Clean Metals Monitoring Programs).
- 15) Investigate adding parameters that can be run using the in-house Ion Chromatograph especially for bromide and fluoride (Bimonthly/Clean Metals Monitoring Programs).
- 16) Temperature violations in lower river need to be investigated.
- 17) Broad Scan survey of pollutants with criteria that are not routinely monitored is valuable and should be repeated every 5-10 years.
- 18) Investigate the feasibility of making ODS data sets publicly available.
- 19) Strive to maintain 4 pools per year which keeps us on schedule to complete entire river every 5 years.

- 20) Utilize HOBO continuous monitors to bracket the 4 pools in which biological monitoring will be conducted.
- 21) Define the fish species which fall into each of the trophic levels specifically for the Ohio River (important for mercury impairment issue).
- 22) Investigate entering biological data into EPA's STORET national database.

TEC Guidance and Action on Review of Variances

TEC directed staff to send a letter to each of the mainstem states highlighting the need to notify discharges of the approaching prohibition of mixing zones for BCCs and the potential need for them to request a variance from ORSANCO. TEC further recommends to the Pollution Control Standards Committee that an ad hoc committee be established to address the near-term variance review needs. Further, TEC identified the need to review the prohibition on mixing zones for BCCs to determine whether it is appropriate for the Ohio River.

Member Updates and Interstate Water Quality Issues

United States Geological Survey

Mr. Guertal informed the committee that a joint USGS-IDEM report has recently been released on "Identifying Nutrient Reference Sites in Nutrient-Enriched Regions: Using Algal, Invertebrate, and Fish-Community Measures to Identify Stressor-Breakpoint Thresholds in Indiana Rivers and Streams, 2005-9." LandSat8 was successfully launched which will begin producing important satellite data. He also distributed a factsheet for TEC's information on the "Midwest Stream Quality Assessment" program that TEC received a presentation on at its previous meeting.

United States Army Corps of Engineers

The Corps has been working with the USGS to consider expanding the existing flow monitoring network with Acoustic Doppler Velocity Meters. Units are currently located at Sardis, OH and Shawneetown, IL and there are possible additional sites at Olmsted, IL, Louisville, KY, and the Thomas More field station upstream of Cincinnati. The Council on Environmental Quality recently requested that the Corps release their Climate Change Adaption Plan which recommends that the Corp incorporate climate change adaptation strategies into all of their programs. There is currently an unexpected harmful algae bloom occurring on the CJ Brown reservoir west of Columbus, OH having algae counts above two million cells per liter. The next meeting of the Ohio River Basin Alliance is scheduled for March 26-27 in Louisville, KY.

Water Users Advisory Committee

The Water Users met Jan 22-23 in Cincinnati. The committee noted results of the TDS study indicate that TDS levels on the Ohio River are below the 500 mg/L criterion, however the committee fully supports the continued existence of this criterion and points to improvements in the Monongahela River as a reason to keep the criterion in place. The committee continues to consider the bromide issue and supports work to develop a future bromide criterion. The focus of that work will be on determining if, and at what levels, the existence of bromide in source water causes effects on finished water total trihalomethanes. The committee also received a presentation on alternative disinfection methods using copper-silver ionization which could reduce or eliminate the use of chlorine. The next Water Users Advisory Committee meeting is scheduled for May 7-8.

Power Industry Advisory Committee

Mr. Reash reported that the steam electric effluent guidelines rule is scheduled to be issued draft by EPA in April which will specify minimum treatment for all power plant waste streams and will likely focus on FGD discharges. The final rule regarding section 316b fish impingement and entrainment is scheduled to be issued by EPA in June. It is uncertain as to when EPA will issue the final rule regarding the RCRA regulation of coal combustion byproducts which will dictate whether these wastes are regulated as hazardous or not. In anticipation of the issuance of this rule, many facilities are converting from wet ash disposal to dry ash disposal.

Indiana

Ms. Selvaratnam reported that IDEM is working on numerical nutrient criteria for flowing waters. Their Technical Advisory Team will be meeting for this purpose at the end of February. This work will not include the criteria for the Ohio River.

New York

Commissioner Conroe reported for New York on behalf of Jeff Konsela. Two major flood control projects on the upper Allegheny River were recently approved by the Army Corps of Engineers. The state has committed over \$50 million to address flood control deficiencies throughout the state. A rule regarding water withdrawals is being proposed which would require any withdrawals over 100,000 gallons to be regulated. The state initially will be working on regulating the largest withdrawals. A phosphorus TMDL was recently developed for Chautauqua Lake which has two separate numerical targets for phosphorus for the upper and lower parts of the lake. This TMDL will have an impact on municipal wastewater treatment facilities requiring reductions of over 80 percent in certain cases over a five year period.

Pennsylvania

Mr. Schwartz discussed PaDEP's requirements for water withdrawals which will be presented at the April water resources meeting. A consent agreement was signed last fall with the First Energy Little Blue Run facility to discontinue disposal of FGD scrubber sludge to Little Blue Run by October 2016. There currently is a small volume discharge from the impoundment to the Ohio River which is planned to be eliminated in the future by converting the discharge back to its original status as a tributary. This future action will ultimately be beneficial to the Ohio River.

West Virginia

Mr. Mandirola reported that WVDEP is currently conducting a triennial review of its water quality standards. They are considering changing their contact recreation criteria from fecal coliform to E. coli based on EPA's recommendations. A small portion of the lakes criteria language for nutrients was not approved by EPA and is being reworked. The hardness-based aluminum criteria are being updated. The current beryllium criterion is 0.007 ug/L and is being considered for revision to 4 ug/L. There are some site-specific zinc criteria proposals under consideration. Public comments received recommended developing a bromide criterion, however the agency currently has no basis for proposing a specific numeric criterion at this time. The aluminum and beryllium criteria have been put in place already using an emergency rule that is under public notice at this time. Finally, WVDEP has been required by the legislature to incorporate fish metrics into its biological assessment tool.

Finally, there is an oil and gas rule under consideration by the legislature that incorporates requirements for water management plans. It will require approved water management plans for all withdrawals over 250,000 gallons.

Virginia

Ms. Davenport reported that the state is on the verge of recombining its nonpoint and point source programs within the water division of VADEQ. This may be important to ORSANCO since one ORSANCO Commissioner is from the Department of Conservation and Recreation which will be losing the nonpoint source program. The DEQ is working on a New River PCBs TMDL that encompasses almost 100 impaired stream miles and 4,200 impaired reservoir acres. Additional monitoring will be conducted at 32 stream sites and they are currently working on a source assessment and PCBs loadings for the New River. Permitted discharges are being asked to conduct voluntary monitoring. Several mining TMDLs which have previously been reported to TEC are nearing completion by the Department of Mines, Minerals and Energy. A final public meeting is planned for April.

Ohio

Mr. Elmaraghy reported on the status of the Cincinnati MSD federal consent decree that both OEPA and ORSANCO are a party to. MSD is proposing to revise its Lower Mill Creek remedy from the default tunnel project to sewer separation and “green” infrastructure projects. The public comment period has closed and a responsiveness summary is being developed. OEPA has received a 60 day notice of intent to sue regarding the Peter Cremer South Terminal from the Ohio River Foundation. Since 2010, the facility has had a total of nine violations for its discharge of oil and grease and its pH limits. OEPA does not intend to take any enforcement action. D&L Energy and Hardrock Excavating were caught illegally dumping oilfield brine waste into storm sewers leading to a Mahoning River tributary. D&L Energy operates underground injection wells for waste disposal. Civil and criminal investigations are ongoing, but state actions include requiring D&L Energy to cease all well injection operations with revocation of all of its six current permits, denial of three pending new permits, and revocation of Hardrock Excavating’s brine haulers permit.

Kentucky

Mr. Payne reported that the lower Tennessee River has an abundance of mussel beds with federally-listed endangered species. With increasing transportation along that portion of the river, the state is working with the Corps to consider alternative for better protection of these mussels. In addition, the Tennessee River is classified as a Kentucky outstanding state resource water. New criteria for selenium have been proposed based on the USEPA 2004 draft criteria. A tissue-based chronic criterion is being proposed. A 30-day delay is currently in effect, although the legislature has approved two of four chapters that were proposed. A TMDL for Floyds Fork, a tributary of the Salt River in the Louisville area, is being conducted which includes numeric targets for nutrients. This TMDL has become a sensitive issue within the state.


Next Meeting

The next meeting of the Technical Committee will be held on Tuesday, June 4, 2013 at the Renaissance St. Louis Airport Hotel, St. Louis, Missouri.

Adjournment

The 201st meeting of the ORSANCO Technical Committee was adjourned on Wednesday, February 13, 2013.

Approved:



Toby Frevert, Chairman

Prepared by Jason Heath, P.E., BCEE with contribution from Stacey Cochran, Sam Dinkins, Jerry Schulte, Jeff Thomas, and Greg Youngstrom.

(Tape recording of proceedings available at Commission Headquarters)

PowerPoint presentations from this meeting are available on the Commission website at www.orsanco.org.

Roster of Attendance

Technical Committee

Chairman	Commissioner Toby Frevert
Illinois	Not present
Indiana	Shivi Selvaratnam
Kentucky	Randy Payne
New York	Not present
Ohio	George Elmaraghy
Pennsylvania	Ron Schwartz
Virginia	Melanie Davenport
West Virginia	Scott Mandirola
US Army Corps of Engineers	Erich Emery
US Coast Guard	Mike Callinan
US EPA	Sally Gutierrez
US Geological Survey	Bill Guertal
Chemical Industry Committee	No representative
POTW Advisory Committee	No representative
Power Industry Advisory Committee	Rob Reash
Public Interest Advisory Committee	Eriks Janelains
Water Users Advisory Committee	Ron Bargiel
ORSANCO Chief Engineer	Peter Tennant
Staff Liaison	Jason Heath

Commissioners

Stuart Bruny, Doug Conroe, Chuck Duritsa, Tom Easterly, David Flannery, Sandy Gruzesky (proxy), Ken Komoroski, Ron Lovan, Phil Morgan, Scott Nally, Greg Phillips, Ron Potesta, Paul Tomes, Mike Wilson, Ross Wales - Commission Legal Counsel

Staff

Ryan Argo, Dave Bailey, Steve Braun, Lisa Cochran, Stacey Cochran, Sam Dinkins, Tracey Edmonds, Joe Gilligan, Eben Hobbins, Jeanne Ison, Travis Luncan, Jerry Schulte, John Spaeth (MBI), Rob Tewes, Jeff Thomas, Jamie Wisenall (MBI), Greg Youngstrom, Lila Ziolkowski

Guests

Cheri Budzynski	Shumaker, Loop, and Kendrick
Reed Coen	Public Interest Advisory Committee
Brian Dillemath	Rex Energy Corp.
Reed Harris	RHE Ltd.
Betsy Mallison	Public Interest Advisory Committee
Paul Novak	Chair, NPDES Subcommittee
Judy Petersen	Public Interest Advisory Committee
Ron Riecken	Public Interest Advisory Committee
Laura Ringenbach	Taft, Stettinius & Hollister
John Wirts	Chair, Biological Water Quality Subcommittee
Bruce Whittebury	Water Users Advisory Committee