

# OHIO RIVER VALLEY WATER SANITATION COMMISSION

**MINUTES**  
**197<sup>th</sup> Meeting of the Technical Committee**  
**October 11-12, 2011**  
**Melrose Hotel**  
**Washington, DC**

**Chairman Toby Frevert Presiding**

(Note: Power Point presentations from this meeting can be found on the ORSANCO web site: [www.orsanco.org](http://www.orsanco.org))

**Call to Order**

The 197<sup>th</sup> meeting of the ORSANCO Technical Committee was called to order by Chairman Frevert at 1:00 pm EDT on Tuesday, October 11, 2011. Seven states, three federal agencies and four Commission advisory committees were represented. (For Roster of Attendance, see page 11.)

**Minutes of 196<sup>th</sup> Committee Meeting**

**ACTION:** Motion by Ms. Selvaratnam, second by Ms. Wilhite and carried, that the minutes of the June 7- 8, 2011 meeting of the Technical Committee (distributed by email on August 4, 2011) be adopted.

**Chief Engineer's Report**

Mr. Vicory reported on a number of items:

**Mississippi River Watershed Initiative** – ORSANCO was invited to participate in a multi-stakeholder initiative for the Mississippi River Basin, similar to the Ohio River Basin Alliance. The idea of a joint meeting of ORSANCO and the Upper Mississippi River Basin Association was discussed by the representatives of the two organizations.

**Total Dissolved Solids** – Issues surrounding the process by which the Commission adopted a 500 mg/L criterion for dissolved solids have been resolved and the criterion is now in effect.

**Emerson Electric Settlement** – The Kentucky Division of Water has directed that \$20,000 of an enforcement settlement with Emerson Electric be directed to ORSANCO to improve water quality monitoring in the Maysville area.

**Ashland ODS site** – A new Organics Detection site has been established at Ashland, Kentucky. The site has already played a role in monitoring the effects of a spill to the Big Sandy River.

**Water Resources Committee** – The Committee met by conference call in late September and approved a draft Memorandum of Understanding for signature by the state Governors.

**Bacteria TMDL** – The Commission is carrying out bacteria monitoring of Ohio River tributaries in support of the development of a TMDL for the Ohio River.

**Variance Request** – A request has been received from PPG for a variance to Section VI.G of the Commission Standards.

### **US EPA Update**

Ellen Gilinsky, former Technical Committee member from Virginia who is now a senior advisor to the US EPA Assistant Administrator for Water, briefed the Committee on a number of items:

#### **Nutrients**

EPA is working on several issues involving nutrients. Collaborative efforts with the US Department of Agriculture are continuing toward better definition of nutrient sources and their reduction. EPA is encouraging the states to develop nutrient reduction strategies, following a framework issued by the agency in March. The strategies would include prioritization of watersheds for nutrient reduction. EPA continues to believe that nutrient standards or caps can play an important role in reduction efforts.

#### **Biocriteria/ Nutrients Workshop**

A workshop on the role of biological criteria in developing nutrient standards was held the week before the Technical Committee meeting. Workshop participants included representatives from 15 states. A summary report from the workshop will be issued.

#### **Water Quality Standards Regulation Revision**

The water quality standards regulation has not been modified in 27 years. Proposed revisions would seek to modernize the regulation, including allowance for options in seeking variances. The proposed rule has been sent to the Office of Management and Budget for review.

#### **Post- Construction Stormwater Rule**

The proposed rule is still under development at EPA. The rule would establish performance standards for sites and would encourage on site retention and low impact development.

#### **Waters of the US**

Ms. Gilinsky reported that US EPA is working with the Corps of Engineers on a joint rulemaking.

#### **Wet Weather**

EPA is developing an integrated permitting approach for wet weather sources. The approach will take the form of policy, not a rulemaking.

#### **Drinking Water**

EPA's March 2010 Drinking Water Strategy calls for development of limits for groups of contaminants rather than individual chemicals. The first group being addressed is

carcinogenic volatile organic compounds. The agency is also working toward development of new treatment technologies.

The agency is working on a proposed revision of the 1991 lead and copper rule, which is expected to be issued in 2012. The proposed rule would address sampling, corrosion control, and lead line replacement.

Proposed revisions to the Total Coliform rule are expected to be finalized in 2012. The emphasis will be on protection of vulnerable water systems. The agency also intends to develop a rule for perchlorate, with a proposal anticipated in 2013.

### **ACWA Update**

Alexandra Dunn, Executive Director and General Counsel of the Association of Clean Water Agencies (formerly ASIWPCA), provided updates on several issues on which the Association is working with US EPA including a review of Section 319 of the Clean Water Act, review of MOAs/ MOUs, and a TMDL Strategic Plan. She also provided the following updates:

#### **Expansion of the Scope of the NPDES Program**

The number of permitted facilities has increased by an order of magnitude since the NPDES program was established; this is due to the inclusion of such pollution sources as storm water and animal feeding operations.

#### **General Permit for Pesticides**

The final permit will go into effect on October 31, 2011; it will cover applications of pesticides registered for aquatic uses and applied to water or forest canopies into or over flowing or seasonal waters, and conveyances to those waters.

#### **Stormwater**

US EPA submitted a Report to Congress this fall which covered:

- Areas outside the program
- Types of pollutants
- Programmatic recommendations

A Proposed Rule will be published in December; it will cover:

- Expanding definition of MS4
- Performance standard for discharge from new sites
- Performance standard for discharge from redeveloped sites
- Performance standard for retrofits
- Green infrastructure

The final rule is scheduled for adoption in September 2012.

#### **Nutrients**

ACWA continues to work with US EPA on several initiatives to improve nutrient management.

#### **Budget**

Federal funding of state and interstate water pollution control programs has increased significantly since 1972; however, when adjusted for inflation, the increase is

considerably less. It is anticipated that the budget for fy2012 may include a reduction in 106 funding.

### **Nutrient Issues**

Mr. Heath presented a status report on the Wabash River project. One year of data has been collected; nutrient concentrations vary widely and appear to vary with stream flow. Impacts of the Wabash River on dissolved oxygen levels in the lower Ohio River have not been evident.

Dale Robertson of USGS provided a report on the latest applications of the SPARROW model to the upper Midwest. The model results indicate which watersheds contribute the highest loadings of nutrients to downstream waters.

Mr. Heath presented a progress report on development of numerical nutrient criteria for the Ohio River. A panel of experts is being assembled to assist staff in this effort.

Mr. Tennant presented a summary of a proposal that was recently submitted to US EPA's Gulf of Mexico Program Office. The project would provide assistance to states in the preparation of nutrient reduction strategies.

Mr. Tennant presented an update on the development of an Ohio River Basin Water Quality Trading Program. In meetings with state agency staffs, concerns have been raised as to US EPA's position on credits for point source dischargers who participate in trades in advance of regulatory requirements. A recent exchange of letters between Alan Vicory and EPA Deputy Administrator Bob Perciasepe (Appendix 1) was summarized.

### **ORSANCO Pollution Control Standards – 2011-12 Review**

Mr. Tennant briefed the Committee on the consideration of comments received in the current review of the ORSANCO Pollution Control Standards. Special work groups were formed to address issues involving bromide, mercury and temperature. The work groups on bromide and mercury have recommended additional studies and will not propose revisions for this review. The temperature work group is expected to propose revisions in time for this review.

### **Report of the Stream Criteria Subcommittee**

Bob Mosher of Illinois EPA, chairman of the Stream Criteria Subcommittee, reported that the Subcommittee met by conference call on September 6. The Subcommittee heard updates on revisions to EPA criteria. Draft revised criteria for chlorides and selenium will be issued in 2012. Final criteria for ammonia and pathogens are expected to be adopted in 2012. It is anticipated that none of these criteria revisions will be available for adoption in this review of the Commission Standards.

### **Report of the NPDES Subcommittee**

Paul Novak of Ohio EPA, chairman of the NPDES Subcommittee, reported that the Subcommittee met by conference call on August 25. The Subcommittee discussed the implementation of ORSANCO's recently adopted criterion for total dissolved solids which applies at drinking water intakes. The states believe that there are differences among them in how such criteria are applied. Staff was requested to compile the states' policies and/or procedures on this.

The Subcommittee reviewed a proposed procedure for consideration of requests for variances. Concern was expressed that the proposed procedure did not identify criteria for making affordability decisions.

The Subcommittee provided input to a proposed staff study to determine impacts of FGD scrubber waste.

The Technical Committee considered the proposed protocol for consideration of variances. Several members suggested that there should be a single procedure for consideration of all variance requests, not just those to Section VI.G.

### **Pathogens**

Sharon Nappier of US EPA provided an update on the development of new pathogen criteria for protection of recreational use. It is EPA's current thinking that the 1986 geometric mean criteria for e coli (fresh waters) and enterococcus (marine waters) will be retained, but that clarification will be provided on the application of the criteria, including the period for the geometric mean and the use of the single sample maximum.

Mike Apgar presented recommendations from the POTW Committee that the Commission revise its Standards to use a six month geometric mean rather than a 30 day mean, eliminate the single sample maximum, and allow for suspension of recreational use under certain high flow conditions.

It was suggested that a member of the POTW Committee attend the upcoming PIACO meeting to discuss the efforts by individual POTWs to educate the public on wet weather issues.

### **Ohio River Water Quality Assessment**

Mr. Heath presented the schedule and approach for the 2012 Ohio River assessment. The initial assessment will be completed by the end of 2011 in order to allow all of the states to incorporate it in their 305(b) reports. The final written report will be presented to the Technical Committee in time for approval at the June, 2012 meeting.

Mr. Thomas presented plans for using Ohio River Basin data from the National Assessment of Rivers and Streams to carry out a basin wide assessment. US EPA will be conducting a national assessment of the data and will also do some regional assessments but will not be assessing the results on a river basin basis.

### **Member Reports**

#### ***US EPA Region 3***

Mr. Ambrogio reported that the Delaware River Basin Commission has placed a moratorium on water withdrawals for shale gas development until regulations can be developed and adopted. It is anticipated that proposed regulations will be presented for a vote by the Commission in November.

#### ***West Virginia***

Mr. Mandirola informed the Committee that the triennial review of the West Virginia water quality standards is complete. Provisions pertaining to the Ohio River included exemptions to the half mile rule above drinking water intakes for milepoints 61.0 to 63.5 and 70.0 to 71.0.

Parameters at issue are iron and sulfate. The variance for Harmon Creek, based on economic conditions, was removed. Use of Harmonic Mean Flow (rather than 7Q10) as the design flow for carcinogens for the stretch of river between milepoints 68 and 70 was authorized. The standards revision also includes nutrient criteria for lakes.

Mr. Mandirola noted that PPG recently submitted a request for a variance from the Commission standards to allow continuation of a mixing zone for mercury. Mr. Mandirola has been informed that similar requests will be received from POTWs.

West Virginia has adopted an emergency rule requiring water management plans for oil and gas development. The plans would include identification of water sources, listing of uses of the water, inventory of chemicals added, and description of disposal.

Two facilities that treat mining wastes are intending to relocate their discharges to the Ohio River; the point of discharge would be about five miles upstream of a drinking water intake. This will require analysis of possible violations of the new total dissolved solids criterion for drinking water protection.

### *USGS*

Mr. Guertal informed the Committee of an upcoming meeting (November 14-16) involving USGS, the Corps of Engineers, and the National Weather Service to address Ohio River issues of mutual concern. Mr. Guertal also informed the Committee about updates to the SPARROW model and nutrient assessments conducted under the NAWQA program. He also announced that the 2010 Water Use Compilation is now complete.

### *Indiana*

Ms. Selvaratnam reported that a TMDL for Highland Pigeon Creek has been completed by IDEM and approved by US EPA. The TMDL covered 57 individual impairments – 54 for E. Coli and 3 for Total Phosphorus.

Ms. Selvaratnam also reported that Indiana is revising its Chloride criterion for aquatic life protection, utilizing an approach developed in Iowa. An antidegradation rulemaking has been preliminarily adopted by the state Water Pollution Control Board.

Ms. Selvaratnam next reported on the recent issuance of NPDES permits for three industries and two municipalities with discharges to the Ohio River. She informed the Committee that IDEM will provide funding to ORSANCO for continuation of the Wabash River project. She noted that 401 certification has been requested for hydroelectric facilities at two Ohio River dams – Newburgh and Myers. She also provided an overview of IDEM's Monitoring Strategy which calls for a nine year rotating watershed cycle. Ohio River tributaries will next be monitored in 2019.

Ms. Selvaratnam concluded her report by informing the Committee that IDEM had received a letter from US EPA requesting that nutrient limits be included in new permits based on the narrative included in the Indiana Water Quality Standards:

Discharge shall not cause receiving waters "to contain substances which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree to create a nuisance, be unsightly, or otherwise impair the designated uses."

Three alternative approaches were identified in the letter:

- Calculate criterion based regulation for interpreting narrative
- Set limit based on EPA's CWA section 304(b) criteria
- Set limit on indicator parameter

### ***Virginia***

Ms. Davenport informed the Committee of a study of a chlorophyll a standard for the James River in Virginia which might have application on other rivers.

### ***Corps of Engineers***

Mr. Emery informed the Committee of plans by the Corps to host a workshop on remote sensing. The Corps is interested in finding efficient ways to monitor water quality at its projects in the Ohio River Basin, including 79 multi purpose reservoirs. He also announced a water quality workshop to be held in Cincinnati on December 7-8. The Corps is also attempting to work with hydropower operators on the Ohio River to utilize satellite transmission to provide real time water quality data.

**ACTION:** Motion by Ms. Wilhite, second by Ms. Selvaratnam, that the Technical Committee recommend that the Commission write a letter to Ohio River hydroelectric facility operators in support of efforts by the Corps of Engineers to assure adequate monitoring of water quality at the hydro facilities.

### ***Power Industry Advisory Committee***

Mr. Snyder reported that members of the Committee are working with ORSANCO staff on studies of mercury and total dissolved solids. In late March, US EPA released the draft 316(b) rule which regulates fish impingement and entrainment at power plant intakes. The rule applies to all facilities which withdraw 2 MGD or more, and does not provide for credits for measures taken to protect fish populations, such as installation of cooling towers. PIAC has submitted comments on the proposed rule, which is expected to be finalized in 2012. Mr. Snyder attended a stakeholders meeting on new effluent guidelines for the steam electric power industry just prior to the Technical Committee meeting. He noted that personnel from American Electric Power and the Electric Power Research Institute are working on a report on mercury and selenium in fish tissue; the report should be completed in 2012.

### ***Ohio***

Mr. Elmaraghy reported on current issues and Ohio River facilities status. He began with an update on the development of nutrient criteria for Ohio. OEPA is working with US EPA Headquarters and Tetra Tech. A technical support document for trophic index criteria is expected to be completed in 2012. Staff from OEPA participated in an ACWA/ EPA workshop on biocriteria and nutrients. There was a strong state consensus that biocriteria (response to nutrient concentration) should temper decision making on imposing nutrient TMDLs and controls.

Ohio adopted a new state strategy for issuing public advisories regarding harmful algae blooms. The focus of the strategy is on public lakes with boat ramps and/or beaches.

Mr. Elmaraghy next reported on efforts to reduce harmful algae blooms in Grand Lake St, Marys. Results for June 2011 partial lake alum treatment indicate that Total P declined at

Station L-1 by 56%. This is indicative of what can be expected from a whole lake alum treatment. A Total P decrease of 20 to 30% by the end of the treatment and study period throughout lake may indicate a direct influence of treatment. It appears that repeat alum treatments (treating the entire lake to inactivate sediment and strip the water column of P) will be advantageous and necessary to maintain beneficial uses of the lake until watershed loading of P is reduced significantly

Mr. Elmaraghy reported that Ohio EPA is developing a General 401 Permit to cover stream and wetland impacts associated with the Marcellus Shale drilling including:

- Drilling Pads
- Access Roads
- Water Supply Lines

The permit does not cover gathering lines and major transmission lines. The permit authorizes impacts up to ½ acre of Category 1 and 2 wetlands; impacts to Category 3 wetlands are excluded. The permit authorizes impacts up to 300 linear feet of stream; impacts to high quality streams are excluded. The time frame for permit review calls for a completeness review with the general permit being issued or denied within 30 days of the completeness determination. The applicant still needs to obtain an individual 404 permit.

Mr. Elmaraghy reported that Ohio is looking at how other states address noncompliance by minor dischargers. It is believed that a more streamlined approach involving increased orders with smaller penalties might reduce the rate of significant noncompliance by minor dischargers.

In the area of rulemaking, Mr. Elmaraghy reported that water quality standards revisions including updated ORSANCO Pollution Control Standards will be proposed this fall (TDS at drinking water intakes, Human Health criteria for chemical contaminants) Antidegradation BADCT for nutrients rulemaking will also be proposed this fall. Draft Water Quality Trading rules are available for interested party comment until Oct. 25, 2011

Mr. Elmaraghy next reported on the status of the 11 Ohio communities along the Ohio River with combined sewer systems. Eight now have approved Long Term Control Plans, one has completed implementation, one plan is under review, and two have yet to submit plans.

Mr. Elmaraghy then presented facility reports, beginning with *Gallia County* where **Ohio Power Gavin/AEP**, was issued a Permit To Install for a small pilot facility to treat water from one of the FGD landfill ponds to remove mercury. This treatment may be used at other facilities in future if it works.

In *Adams County*, a draft permit for *DP&L Stuart* is still pending. DP&L submitted a proposal to US EPA and Ohio EPA to address thermal issues by changing the discharge point from Three Mile Creek to the Ohio River. US EPA is still evaluating the proposal.

#### ***Water Users Advisory Committee***

Mr. Wang informed the Committee that this would be his last meeting as his term of office as chairman of the Water Users Advisory Committee was coming to an end. He encouraged the



two Committees to continue to collaborate. He also encourages the Technical Committee to consider the coordination of Clean Water Act and Safe Drinking Water Act requirements.

### ***Kentucky***

Mr. Payne reported that Kentucky received approval of its Anti Degradation regulation from US EPA on October 5. This culminated a process that began in 2007 when a court decision remanded the regulation.

Mr. Payne reported that Kentucky is developing a Nutrient Reduction Strategy. Preliminary work has been carried out in house by the Division of Water but stakeholder involvement has begun. Contractor support may be necessary to complete the strategy. It had been hoped that nutrient criteria for wadeable streams might be adopted in the next triennial water quality standards review, but additional data collection will be needed to reach end points for the entire state. It is now hope that the criteria can be included in the following triennial.

Mr. Payne noted that 40 TMDLs have been approved so far this year, mostly for pathogens. Seven additional TMDLs are currently under development, and two have been submitted but not yet approved. Kentucky is developing its first TMDL for nutrients; the waterbody is Floyd's Fork in Louisville. A reference reach approach is being used. EPA recently approved Kentucky's 2010 303(d) list.

Kentucky intends to submit fish tissue samples for analysis for methyl mercury in the upcoming year. Previous analyses have been for total recoverable mercury. A contract lab will be used initially, but it is hoped that the Division of Water can develop in house capability to perform the analyses in subsequent years.

Ms. Gruzesky added that the Division of Water is working on wastewater laboratory certification rules. She also noted that the Division is attempting to base coal permit requirements on interpretation of the state's narrative biological criteria. This is proving difficult for discharges to impaired waters.

### ***POTW Advisory Committee***

Mr. Apgar informed the Committee that his would be his last meeting as he is retiring from Sanitation District No. 1. He expressed his appreciation for the opportunity to meet and work with the Committee members.

### ***Public Interest Advisory Committee***

Mr. Janelins reported that PIACO will meet in November. The agenda for the meeting will include the review of the Commission Standards, including both the issues being addressed and the efforts to provide for public input.

### ***Illinois***

Ms. Wilhite reported on Illinois EPA's efforts to reduce nutrients in Illinois waters. Nutrient issues in Illinois include elevated nitrate in water supplies and aquatic life impairments due in some part to phosphorus levels. In addition, nutrients entering Illinois waters have been identified as contributing to hypoxia in the Gulf of Mexico. Efforts to define cause and effect relationships that could lead to numerical criteria for nutrients have not been successful. The state is therefore using a technology based approach to require nutrient controls on facilities discharging to waters experiencing eutrophication, or to those which are expanding.

## ***Pennsylvania***

Mr. Schwartz informed the Committee of the passing of Tom Proach, a long time Pennsylvania DEP biologist who worked on many ORSANCO-sponsored fish studies and was considered an expert in identification of Ohio River species.

Mr. Schwartz reported on a flooding incident in the Washington Boulevard area of Pittsburgh brought on by a three inch rainfall in one hour which caused a 96 inch storm sewer to surcharge, resulting in a 10 to 14 foot flood. Four people were killed by the flood waters.

Mr. Schwartz reported that a Marcellus Caucus is forming in Congress, with participation from Pennsylvania's delegation. A priority of that Caucus is consolidation of data being collected by various entities; this could be an area for collaboration with the Ohio River Caucus.

Mr. Schwartz informed the Committee of a spill to the Monongahela River which resulted in a fish kill. A cleanup contractor was able to contain some of the spilled material – an industrial detergent containing naphthalene – and transported it to a POTW on the Allegheny River for disposal. The material disrupted treatment at the POTW and caused a fish kill in the receiving water.

### **Area Contingency Planning**

Mr. Schulte reported on activities that will be carried out in support of contingency planning for spills and other environmental emergencies in the Ohio River Basin. These activities will be supported by US EPA.

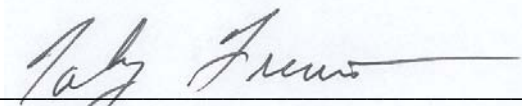
### **Next Meeting**

The next meeting of the Technical Committee will be held on February 7-8, 2012 in Cincinnati, Ohio.

### **Adjournment**

The 197<sup>th</sup> meeting of the ORSANCO Technical Committee was adjourned at 12:00 pm EDT on Wednesday, October 12, 2011.

Approved:



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Toby Frevert, Chairman

Prepared by Peter A. Tennant, PE

(Tape recording of proceedings available at Commission Headquarters)

PowerPoint presentations from this meeting are available on the Commission web site at [www.orsanco.org](http://www.orsanco.org).

## Roster of Attendance

### Technical Committee

Chairman	Commissioner Toby Frevert
Illinois	Marcia Wilhite
Indiana	Shivi Selvaratnam
Kentucky	Randy Payne
New York	no representative
Ohio	George Elmaraghy
Pennsylvania	Ron Schwartz
Virginia	Melanie Davenport
West Virginia	Scott Mandirola
Federal (US EPA)	Ed Ambrogio
US Coast Guard	Robin Haskins
US Corps of Engineers	Erich Emery
US Geological Survey	Bill Guertal
ORSANCO Chief Engineer	Alan H. Vicory, Jr.
Chemical Industry Committee	No representative
POTW Advisory Committee	Mike Apgar
Power Industry Advisory Committee	Mike Snyder
Public Interest Advisory Committee	Eriks Janelsins
Water Users Advisory Committee	Jack Wang
Staff Liaison	Peter Tennant

### Commissioners

Stuart Bruny, Doug Conroe, Tom Easterly, David Flannery, Phil Morgan, Scott Nally, Greg Phillips, Ron Potesta, Paul Tomes, Bob Wayland, LaJuana Wilcher, Mike Wilson

### Staff

Dave Bailey, Sam Dinkins, Tracey Edmonds, Jason Heath, Jeanne Ison, Jeff Thomas, Jerry Schulte

### Guests

Corey Buffo	US EPA HQ
Alex Dunn	Association of Clean Water Administrators
Steve Dye	McAllister and Quinn
Ellen Gilinsky	US EPA HQ
Sandy Gruzesky	Kentucky DEP
Tim Henry	US EPA Region 5
Lisa Larimer	US EPA HQ
Bob Mosher	IL EPA – Stream Criteria Subcommittee
Sharon Nappier	US EPA HQ
Paul Novak	OH EPA – NPDES Subcommittee
Dale Robertson	USGS
Ellen Tarquinio	US EPA HQ
Ross Wales	Commission Legal Counsel
Tom Wall	US EPA HQ