# MINUTES 196<sup>th</sup> Meeting of the Technical Committee June 7- 8, 2011 William Penn Hotel Pittsburgh, Pennsylvania

# **Chairman Toby Frevert Presiding**

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

### Call to Order

The 196<sup>th</sup> meeting of the ORSANCO Technical Committee was called to order by Chairman Frevert at 1:00 pm EDT on Tuesday, June 7, 2011. Six states, three federal agencies and four Commission advisory committees were represented. (For Roster of Attendance, see page 10.)

# Minutes of 195<sup>th</sup> Committee Meeting

**<u>ACTION</u>**: Motion by Mr. Schwartz, second by Mr. Elmaraghy and carried, that the minutes of the February 8, 2011 meeting of the Technical committee (distributed by email on March 25, 2011) be adopted.

#### **Chief Engineer's Report**

Mr. Vicory reported on a number of items:

<u>106 grant</u> - Recent information indicates that the Commission's 106 grant for fiscal year 2011 may be \$58,000 greater than was anticipated in preparing the proposed program and budget.

<u>National Response Center Issue</u> - Senator Rockefeller of West Virginia has written a strong letter to the Coast Guard requesting that ORSANCO receive full information on all Ohio River spills.

<u>SEPs</u> - The Commission will receive \$40,000 under enforcement settlements with a West Virginia discharger - \$30,000 to support a panel of experts on nutrient criteria development and \$10,000 to repair the mobile aquarium.

<u>PPG</u> - A meeting was held recently with PPG to discuss a possible request for a variance from mercury requirements. Personnel from West Virginia, Indiana and Kentucky attended.

<u>Pathogen TMDL</u> - The Commission will receive funding from US EPA to conduct additional monitoring of tributary bacteria levels to support the Ohio River TMDL for pathogens.

<u>Committee Changes</u> - Five persons were attending their first Technical Committee meeting either as new members or proxies.

# **ORSANCO Technical Programs for FY2012**

Mr. Tennant reviewed the recommendations developed by the Committee at its previous meeting to guide the development of ORSANCO technical programs for fiscal year 2012 (Agenda Attachment, Item 5). Staff was able to incorporate the recommendations to some extent in the proposed programs, although resource limitations prevented full incorporation.

**<u>ACTION:</u>** Motion by Ms. Selvaratnam, second by Mr. Schwartz and carried, that the Technical Committee endorses the proposed ORSANCO programs for fiscal year 2012.

Mr. Tennant noted that, as Mr. Vicory reported earlier, there would be an additional \$58,000 in fy2011 106 funding available over what had been anticipated when the proposed budget was developed. The amount of fy2012 106 funds, however, is yet to be determined. Mr. Elmaraghy suggested that any additional funds should be used to enhance work on tributaries.

Mr. Tennant then presented some possible areas for future reductions if funding continues to be limited; these included reducing ambient monitoring from bi-monthly to quarterly, reducing biological studies from four to three navigation pools per year, and reducing the number of fish tissue samples. The Committee agreed that these would need to be vetted with the appropriate work groups before they could be considered by the Commission.

# **ORSANCO Pollution Control Standards**

Mr. Tennant presented a recommendation by the Pollution Control Standards Committee that the Commission adopt a 500 mg/L criterion for total dissolved solids to apply at drinking water intakes. Questions were raised as to how this might be implemented; it was agreed that the NPDES Subcommittee should continue its consideration of this matter.

In response to concerns raised about the possible impact of a Total Dissolved Solids criterion on stormwater discharges, Mr. Apgar informed the Committee of a study performed by a contractor for Sanitation District Number One that indicated the contributions of dissolved solids from stormwater were not significant.

ACTION: Motion by Mr. Schwartz, second by Ms. Selvaratnam, and carried (Mr. Elmaraghy opposed), that the Technical Committee recommend that the Commission adopt the 500 mg/L criterion for total dissolved solids to apply at drinking water intakes.

Mr. Dinkins presented a summary of a proposed study of levels of total dissolved solids and associated mineral constituents. The study would be funded and carried out under the ORSANCO/ Ohio River Users Program.

Mr. Schwartz suggested that the study should include measurements of temperature and should address vertical integration.

ACTION: Motion by Mr. Elmaraghy, second by Ms. Selvaratnam and carried, that the Technical Committee endorses the proposed study of Ohio River total dissolved solids.

Mr. Tennant then presented a summary of issues raised in the current review of the ORSANCO Standards. A total of 15 issues were raised in the comments received; six were referred to the Technical Committee by the Pollution Control Standards Committee: temperature, bromides, magnesium, ammonia, nutrients and mercury. The Technical Committee agreed to convene special work groups to address temperature, bromides/manganese, and mercury; to task the Stream Criteria Subcommittee to address ammonia; and to task the Nutrient Criteria Work Group to address the nutrient issues. All these groups are requested to provide progress reports at the October meeting of the Technical Committee.

### Subcommittee Reports

Mr. Novak reported that the NPDES Subcommittee is working to develop a process through which requests for variances to the Mixing Zone provisions of the Commission Standards would be handled. The goal is to develop a process that is thorough without being duplicative. The Subcommittee asked that the Pollution Control Standards Committee set forth the criteria that it would use in evaluating such requests.

The NPDES Subcommittee continues to assess state requirements for FGD discharges in order to identify any areas of inconsistency.

The Stream Criteria Subcommittee discussed issues likely to be raised in the review of the Commission Standards. The Subcommittee did not identify any issues to be added to those already identified.

### **Dissolved Oxygen Monitoring**

Mr. Tennant informed the Committee that the Corps of Engineers Louisville District has discontinued operation of electronic monitors on the lower Ohio River. Two of those monitors were part of a dissolved oxygen monitoring system adopted by the Commission in 1986 (Agenda Attachment, Item 8). The long term strategy is to require hydroelectric power facilities to operate the monitors; the Corps has operated monitors at facilities where hydropower was not yet in place.

It was agreed that the 1986 strategy should be revisited, and that an updated approach should be incorporated into the Commission's Monitoring Strategy. In the interim, the Committee agreed to request that the Corps resume operation of the monitors at the two lower river sites.

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

Mr. Heath reported that the 305b Work Group met to address inconsistencies in the 2010 assessment of Ohio River conditions. The work group agreed that there is no impairment of aquatic life due to iron; however, US EPA Region 3 will continue to require that the states list the river as impaired if state criteria for iron are exceeded. The work group called on ORSANCO to adopt a consistent, defensible criterion for iron.

The work group identified three alternative approaches to assessing impairment of fish consumption due to iron. The Technical Committee endorsed the first alternative.

# **Member Reports**

### Indiana

Ms. Selvaratnam reported that a TMDL for Highland Pigeon Creek will be completed in August. The TMDL will cover E. Coli and Total Phosphorus. She noted three minor spills to the Ohio River between January and May.

Ms. Selvaratnam also reported that Indiana is revising its Chloride criterion for aquatic life protection, utilizing an approach developed in Iowa. An antidegradation rulemaking is nearing completion, and development of nutrient criteria for rivers and streams is in progress.

# Kentucky

Mr. Payne reported that Kentucky has submitted its 2011 electronic update to its 305(b) assessment. The update primarily includes information from the Salt and Licking River watersheds, with 2691 pollutant-waterbody combinations.

Mr. Payne next reported on a pathogen survey of an Ohio River tributary, Brush Creek. The survey was carried out cooperatively with Sanitation District Number One of Northern Kentucky. The results indicated elevated bacteria levels at all three sites sampled, with the highest levels at a site upstream of a tributary that formerly received the discharge from a now decommissioned point source.

Mr. Payne next reported on a chromium spill from a Hitachi facility in Berea. The incident occurred on February 4 and was reported by the company as a stormwater overflow involving coolant. Sampling by the Division of Water indicated extremely high levels of Hexavalent Chromium in the vicinity of the facility. Fortunately, concentrations remained within criteria at downstream locations above the nearest drinking water intake. The company has been issued Notices of Violation for violations of water quality standards and failure to report discharges. The company has developed a plan to prevent future occurrences

Mr. Payne reported on cooperative efforts with the Corps of Engineers to monitor four Corps reservoirs. The monitoring will be conducted over the growing season and will include extensive monitoring of inputs to the reservoirs.

Mr. Payne reported on performance of major Ohio River discharges in Kentucky. Two facilities had experienced effluent violations since the last report - *Sanitation District #1 Dry Creek* and *Momentum Specialty Chemicals* - while four facilities that had experienced violations in the past - *North American Stainless, MSD West County STP, Paducah/McCracken JSA Paducah*, and *Greenup County Environmental Commission* - did not experience any problems during the most recent reporting period.

Mr. Payne concluded by noting the slow pace of issuance of coal permits due to objections from US EPA, and informing the Committee that one pathogen TMDL is currently out on public notice while another has been sent to US EPA for approval.

# Ohio

Mr. Elmaraghy reported on current issues and Ohio River facilities status. He began with an update on the Grand Lake St. Marys situation. Demonstrations projects involving alum dosing have been completed. Mid lake treatment of approximately 4900 acres has begun. A contact advisory has already been issued due to algae blooms. The Ohio Department of Natural Resources has strengthened controls on manure application to reduce nutrient inputs to the lake. An advisory strategy will be released soon.

Mr. Elmaraghy reported a change in direction on brine wastewater management in Ohio. On May 16, 2011 Ohio EPA sent a letter to Ohio Department of Natural Resources acknowledging their authority to regulate oil and gas drilling and associated wastewater disposal - ODNR's regulations do not provide for brine wastewater disposal at a POTW. Ohio EPA will not renew City of Warren's current acceptance of brine wastewater when permit expires January 31, 2012. Permit applications for brine wastewater disposal will not be approved. 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
- Gathering Lines

It is anticipated that the General Permit will be issued during the summer of 2011.

Mr. Elmaraghy next spoke about isolated streams. Currently Ohio EPA is permitting impacts to non-jurisdictional streams through individual NPDES permits. Permits include "401" requirements. Comment period on rulemaking to address permitting of impacts to non-jurisdictional streams through state water quality permit closed June 6, 2011. Ohio EPA is reviewing the comments and determining next steps.

In its enforcement program, Oho EPA is moving toward a new enforcement approach including expedited enforcement action after few notices of violation, and administrative orders with penalty range from ~\$500 to \$5,000. In full enforcement, changes involve Administrative orders with more significant penalty, Referral to Attorney General's Office, and could replace the current approach of issuing several notices of violation and conducting several inspections to address noncompliance before taking full enforcement.

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

Mr. Elmaraghy then presented facility reports, beginning with *Scioto County* where **Sunoco** (former **Aristech**) has been issued a draft modified NPDES permit to address discontinuing operation of salt recovery system. System recovered salt from a waste stream prior to biological treatment. This will result in raised levels of TDS (sodium sulfates) in the discharge from 2,400 mg/L to 3,300 mg/L - about 900 ppm increase, loading will be 21,600 kg/d. The draft modification includes toxicity monitoring.

In *Adams County*, a draft permit for the *DP&L Stuart* facility is pending. US EPA issued an interim objection letter to the draft permit based on 316(a) variance and thermal load limit. A public hearing on US EPA's objection letter was held on March 23, 2011. US EPA accepted public comments on the objection between Feb 17, 2011 and April 29, 2011. US EPA is working on responsiveness summary for the public comments. Once US EPA notifies Ohio EPA of its decision, Ohio EPA will have 30 days to issue a permit that satisfies US EPA's objection.

In *Jefferson County*, transfer of ownership of the **Severstal** facility to the new owner, RG Steel Wheeling, LLC, has been processed for all the NPDES permits - including Martins Ferry in Belmont County. Ohio EPA is working on renewing the expired NPDES permits.

In *Gallia County*, the Ohio Power Gavin/AEP facility wants to experiment with a small pilot wetland to treat water from one of the FGD landfill ponds to remove mercury. This method could be used at other facilities if it works.

# USGS

Mr. Moorlock informed the Committee of the Integrated Water Resources Science Services charter, which commits USGS, the Corps of Engineers, and NOAA to work in greater collaboration.

# West Virginia

Mr. Mandirola informed the Committee that the triennial review of the West Virginia water quality standards is complete. Three proposed provisions - a criterion for total dissolved solids, nutrient criteria for the Greenbrier River, and water withdrawal regulations - did not survive the Legislative review process. Two provisions pertaining to the Oho River were adopted: use of Harmonic Mean Flow (rather than 7Q10) as the design flow for carcinogens for the stretch of river between milepoints 68 and 70, and allowance of mixing zones between milepoints 61 and 62.5, provided that public water supply use is maintained.

Mr. Mandirola endorsed Mr. Payne's observation on the slow pace of review of coal permits. He noted that all aspects of Marcellus Shale drilling are receiving considerable attention. While the state does not prohibit discharges to POTWs, they are treated as industrial contributions regulated through the pretreatment program.

# Pennsylvania

Mr. Schwartz began with an update on Pennsylvania DEP's efforts to control Total Dissolved Solids (TDS). Chapter 95 regulations were finalized in the August 21 PA Bulletin limiting TDS and Sulfate at 500 mg/L and 250 mg/L respectively. Limits are specific to Oil and Gas Wastewater. Other wastewaters are limited at 2000 mg/L, but are eligible for variances. Two plants are now up and running to recycle Frac water -one in Masontown (Shallenberger) and one in New Stanton (RES). These plants provide no removal of TDS and do not discharge, they just "clean it" through conventional means and recycle it to next Frac use. Three plants in Williamsport, however, either recycle or provide treatment for TDS prior to discharge to a POTW.

The PA DEP Secretary challenged the industry in April to stop taking shale Frac water to STPs and CWTs unless they had effective TDS removal technologies in place. Subsequent inspections show very little if any shale wastewater is now being discharged in PA without TDS treatment. It is either being recycled, sent to plants with TDS treatment (Williamsport) or hauled for deep well injection. Significant enforcement actions have been taken (\$1M Chesapeake fine for "well blowout" and site fire caused by improper handling of organics. Other sources of TDS and Bromide now being investigated (scrubber blowdown, algaecides, CBM etc.)

PA's current in stream standards are equivalent to secondary MCLs for TDS, Chlorides, and Sulfate since Water Treatment Plants cannot remove these pollutants as part of "reasonable treatment" definition in ORSANCO standards. At this time, there are no stream standards for Bromide.

Mr. Schwartz reported on two incidents in May involving foam on streams. The first, on Buffalo Creek, did not appear to be caused by human activity, The second, on Brush Run, appeared typical of conditions caused by acid mine drainage or industrial discharges, but could also have been caused by agricultural runoff.

Mr. Schwartz concluded his report with pictures of barges containing coal and benzene that broke loose in the Neville Island back channel in April, threatening the Robinson township drinking water intake. The barges were recovered without loss of product.

### Power Industry Advisory Committee

Mr. Reash reported on two recent federal rulemakings. In early March, US EPA issued the Utility Boiler MACT rules under Section 112 of the Clean Air Act. The rule sets stringent limits for emissions of compound of sulfur and nitrogen and other pollutants including mercury; the rule will have the effect of requiring more installations of scrubbers and other air pollution control equipment. 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. Requirements regarding impingement are somewhat prescriptive; determination of BAT for entrainment is left to the states. Mr. Reash observed that the draft regulation would result in an increased workload for state agencies.

# Corps of Engineers

Ms. Lee informed the Committee that the Corps is anticipating budget reductions in the upcoming year. Construction of the Olmsted Dam is progressing. She then provided an overview of recent flooding in the Ohio River Basin and the role of the Corps in reducing flood damages.

# Public Interest Advisory Committee

Mr. Janelsins noted the contributions of Ron Riecken, who had served as PIACO Chairman for the previous nine years. He reported that the Committee had met in May; highlights included discussions of more effective means of communication, and improved data sharing.

# Habitat Issues

Mr. Thomas provided an overview of impacts on Ohio River aquatic habitat, including flow alteration, latitudinal and longitudinal connectivity, dredging, water quality alterations, invasive species, and localized habitat alterations. Rick Spear of Pennsylvania DEP then spoke on dredging on the Allegheny and Upper Ohio Rivers, and on efforts to minimize the environmental impacts.

# **Ohio River Source Water Protection**

Mr. Schulte reported on a recent meeting in the Wheeling area which brought together numerous stakeholders involved in protection of drinking water sources.

Stan States of Pittsburgh and the Water Users Advisory Committee presented information on bromide levels in the Allegheny River and their impact on drinking water. High levels of bromide in the source water can contribute to formation of trihalomethanes through the disinfection process.

# Fish Tissue

Mr. Thomas reported on the March 30, 2011 meeting of the Ohio River Fish Consumption Advisory Work Group. The work group reviewed the results of recent fish tissue sampling by ORSANCO with special attention to results for mercury, adopted recommendations for fish tissue sampling in the upcoming year, discussed the progress of the MOU on fish tissue data and assessment, and approved the newly developed Ohio River Fish Consumption web site. The work group recommended continued analyses for both total and methyl mercury using EPA Method 1631. The work group also recommended that fish tissue analyses for chlordane, DDTs, and PBDEs be decreased. The work group recommended that someone from ORSANCO should sign the MOU.

The Technical Committee accepted the Work Group Report, and agreed that the Executive Director should sign the MOU on behalf of ORSANCO.

# Nutrients

Mr. Tennant presented the recommendations from an ASIWPCA workshop on nutrients, which included stakeholders from point sources, environmental advocacy groups, agriculture, and regulatory agencies (Attachment 1). The workshop represented a step toward a more collaborative approach to nutrient management.

Mr. Tennant reported on the continued lack of progress toward development of numerical nutrient criteria for the Ohio River. A call was held with the Nutrient Criteria Work Group to discuss possible alternative approaches. A panel of experts will be convened to review current efforts and to make recommendations for advancing the development of criteria.

Mr. Tennant reported on the project to develop an interstate water quality trading program for the Ohio River Basin. Meetings are being held in state capitals to brief personnel from environmental, agricultural, and conservation agencies on possible pilot trades. The project has drawn interest from high levels of USDA and US EPA; meetings have been held in Washington to identify ways in which the federal agencies can support the advancement of the program.

# **Next Meeting**

The next meeting of the Technical Committee will be held on October 11-12, 2011 in Washington, DC.

<u>Adjournment</u> The 196<sup>th</sup> meeting of the ORSANCO Technical Committee was adjourned at 12:00 pm EDT on Wednesday, June 8, 2011.

Approved:

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.

# **Roster of Attendance**

#### **Technical Committee**

Chairman Illinois Indiana Kentucky New York Ohio Pennsylvania Virginia West Virginia Federal (US EPA) **US** Coast Guard US Corps of Engineers US Geological Survey **ORSANCO** Chief Engineer **Chemical Industry Committee** POTW Advisory Committee Power Industry Advisory Committee Public Interest Advisory Committee Water Users Advisory Committee Staff Liaison

**Commissioner Toby Frevert** no representative Shivi Selvaratnam Randy Payne Jeff Konsella George Elmaraghy Ron Schwartz no representative Scott Mandirola No representative **Robin Haskins** Deborah Lee Scott Moorlock Alan H. Vicory, Jr. No representative Mike Apgar Rob Reash **Eriks Janelsins Ron Bargiel** Peter Tennant

### Commissioners

Doug Conroe, Tom Easterly, David Flannery, Ken Komoroski, Scott Nally, Greg Phillips, Ron Potesta, Lee Servatius, Paul Tomes, Bob Wayland, LaJuana Wilcher

# Staff

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

#### Guests

Gina Cypyd Paul Davis	Pittsburgh Water Tennessee DEC
Erich Emery	Corps of Engineers
Sandy Gruzesky	Kentucky DEP
Gary Hasek	West View Water Authority
Mark Killam	PIACO
Tracy Mehan	Cadmus Group
Randy See	USGS
Randy Sovic	West Virginia DEP (retired)
Rick Spear	Pennsylvania DEP
Stan States	Pittsburgh Water
Mark Stoner	Pittsburgh Water
Carla Syszkowski	Range Resources
Ross Wales	Commission Legal Counsel
Mike Wilson	New York