MINUTES
204th Meeting of the Technical Committee
Embassy Suites RiverCenter
Covington, Kentucky
February 12-13, 2014

Chairman Stuart Bruny, Presiding

Call to Order

The 204th meeting of the ORSANCO Technical Committee was called to order by Chairman Bruny at 1:00 pm (eastern) on Wednesday, February 12, 2014. Five states, two federal agencies, and three Commission advisory committees were represented (for Roster of Attendance, see page 14).

Minutes of 203rd Committee Meeting

ACTION: Motion passed to accept the minutes of the 203rd Technical Committee meeting.

Chief Engineer's Report

Mr. Tennant remarked that he was very impressed with staff performance during the Elk River spill, and that staff would be reviewing the communications aspects to further improve in this area in the future. He indicated that while the spill time of travel model performed well in this incident, it does need to be updated and staff will be working on that issue.

Mr. Tennant indicated that John Klear is leaving the staff due to his relocating to North Carolina.

Staff has completed approximately two-thirds of the sites that ORSANCO is monitoring in support of the National Rivers and Streams Assessment program and will be completing the remainder of sites this field season.

The National Water Quality Monitoring Council is holding its monitoring conference in Cincinnati during the last week of April. A number of ORSANCO staff as well as state and federal agency staff represented at TEC will be participating in the conference.

Mr. Tennant reported that in November he participated in a workshop looking at Mississippi River monitoring. Staff has also been working with the Upper Mississippi River Basin Association on development of monitoring programs on the Upper Mississippi River.

Mr. Tennant announced the upcoming March 11 event to kick off the trading program pilot trades. Three completed trades involving power companies and agricultural entities in Indiana, Ohio, and Kentucky will be recognized.

Technical Program Planning for FY15

Jason Heath provided an overview of the program planning schedule and major program areas that staff would be seeking input from the Technical Committee during the course of the meeting for FY15. An agenda attachment was provided with all of the major tasks to be accomplished during FY14, many of which are completed annually. Program recommendations proposed throughout the meeting would be summarized and reconsidered at the end of the meeting. Two specific issues were identified during this presentation, utilization of $65,000 supplemental monitoring funds (federal funding) to utilize remote satellite sensing data to characterize point source impacts on Ohio River temperatures, and a need to update the spills time-of-travel model. In addition to these recommendations, Commissioner Flannery suggested the need for upgrading the Organics Detection System (ODS) in response to the recent Elk River spill, and Commissioner Bruny suggested the need for activities to address the mixing zone prohibition for bioaccumulative chemicals of concern (BCCs).

Total Dissolved Solids Study

Sam Dinkins presented a revised draft report entitled *Characterization of Dissolved Solids in the Ohio River and Selected Tributaries*. The report (and the companion Responsiveness Summary) incorporated edits submitted on the original draft report presented to the Technical Committee at the October 2013 meeting.

The one-year study entailed weekly sampling at 11 mainstem locations and on five major tributaries (Allegheny, Monongahela, Beaver, Muskingum, and Big Sandy Rivers). Key findings included:

- Total dissolved solids (TDS) concentrations were well below the 500 mg/L standard for all Ohio River samples collected during the one-year study. Levels in the Ohio River ranged from 104 mg/L to 368 mg/L, with a median of 215 mg/L.
- Five major ions accounted for nearly 93 percent of the median TDS concentration in the Ohio River. Sulfate accounted for 31 percent of the total, with bicarbonate comprising another 25 percent. Calcium, chloride, and sodium accounted for 15%, 12%, and 10%, respectively.
- Site specific conversion factors for Ohio River locations indicated a fairly consistent relationship between TDS and specific conductance across sites. Conversion factors for the 11 mainstem Ohio River sites all fell within a narrow range between 0.55 and 0.58, with an overall factor of 0.566 when results from all Ohio River sites were combined. Commonly used default conversion factors (e.g. 0.625 and 0.67) were found to be up to 20 percent greater than the site specific factors determined from this study.
- Regression analysis did not show a strong correlation of bromide in source water to trihalomethanes (THMs) in finished water when all sites were combined. There was insufficient data to evaluate site specific relationships. Results suggest factors influencing the relationship of bromide and THM formation vary greatly from plant to plant, thus making comparisons across sites difficult.

ACTION: Motion passed to recommend to the Commission adoption of the report.

Report of the Stream Criteria Subcommittee

Ms. Selvaratnam reported that the subcommittee had recommendations regarding the 2015 review of the Ohio River Pollution Control Standards and also regarding use of the $40,000 supplemental environmental project (SEP) funds earmarked for nutrient criteria development. Regarding consideration of the initial set of issues identified by the Pollution Control Standards Committee, the subcommittee recommends the following:

- Review the magnitude and frequency of exceedance of the total mercury water quality criterion of 0.012 ug/L.
- The Commission's current E. coli criterion is based on the USEPA's original draft proposal for new bacteria criteria for the protection of contact recreation. Ultimately the USEPA adopted more stringent criteria. The Commission should review the bacteria criteria since the current criteria are less stringent than all the states and USEPA and therefore not useful.
- The human health temperature criterion is located in a section of the standards where the criteria apply outside the mixing zone. But at the same time, the human health temperature criterion itself indicates that it applies "where public access is possible." These two statements about where the criterion applies could be interpreted as conflicting and need to be clarified.
- The USEPA has recommended new ammonia criteria to protect aquatic life based on toxicity to mussels. ORSANCO should determine if these criteria are applicable to the Ohio River.
- The subcommittee recommends evaluating the applicability of the mixing zone prohibition to the Ohio River.

ORSANCO has received $40,000 in SEP funds from West Virginia that are earmarked for nutrient criteria development. US EPA headquarters has offered ORSANCO support for data assessment activities, and staff has been assessing macroinvertebrate metrics against nutrient data which show some future promise in numeric criteria development. Staff attended the USEPA Region 5/headquarters nutrient criteria meeting in February. Suggestions from that meeting included development of a conceptual model, remote sensing data for chlorophyll, modeling, and criteria development based on downstream uses. The subcommittee recommended staff conduct more intensive macroinvertebrate-nutrient assessments, work with USEPA headquarters on data assessment, develop a conceptual model, participate in the USEPA Region 3/headquarters nutrients meeting, and provide a future recommendation to TEC on use of the SEP funds.

Report of the NPDES Subcommittee

Paul Novak reported that the subcommittee met by conference call and is recommending that states send letters to their applicable Ohio River discharges informing them of the effective date of the mixing zone prohibition and informing them of their option to seek a variance from ORSANCO. In addition, the subcommittee agreed on an approach for a streamlined mercury variance procedure as follows:

- Require low level mercury monitoring to determine reasonable potential.
- If a mercury discharge is less than the 12 ng/L criterion as an annual average and an acceptable mercury minimization plan has been submitted, then the discharge can receive a streamlined mercury variance. All other conditions and procedures remain as in the currently adopted variance procedure.

TEC recommends that the NPDES Subcommittee work with the standards committee on the streamlined mercury variance procedure.

ACTION: TEC recommends that the states send a letter to their applicable Ohio River discharges notifying them of the effective date of the mixing zone prohibition, and describing the option to seek a variance from ORSANCO.

Report of the 305b Workgroup

Staff presented the 305b use assessments as agreed upon by the 305b Coordinators Workgroup. The entire river was assessed as fully supporting the aquatic life use based on a weight of evidence approach in which biological pool assessments indicated fully supporting even though there were indications of impairment based on dissolved oxygen, temperature and iron aquatic life criteria violations. The river was also assessed as fully supporting the public water supply use based primarily on the absence of finished water MCL violations attributable to source water conditions. In addition, two thirds of the river is assessed as impaired for contact recreation which is largely based on historic longitudinal bacteria surveys. The entire river is assessed as impaired for fish consumption based on historic PCBs and dioxin water quality data, while utilization of USEPA's approach for determination of impairment based on methyl mercury fish tissue data indicated no impairment.

In addition, Lila Ziolkowski presented a proposed protocol for use of outside data in 305b assessments. A deadline of April 1, 2014 was established to submit comments on the proposed protocol.

The Workgroup also recommends an in-person meeting to develop the proposed assessment methodology for the 2016 305b assessments.

ACTION: Motion passed to approve the 2014 Ohio River 305b assessments as presented.

Report of the Biological Water Quality Subcommittee

Pool Assessments

The four pool assessments (Dashields, Hannibal, R.C. Byrd, and Smithland) were completed from June 30th to August 15th. The Ohio River basin experienced high flows prior to, and throughout, this period. Previous sampling has indicated lowered *m*ORFIn scores when sampling during or shortly after high flow events. The 2013 fixed station scores, however, were well within the 'normal' range of historic scores for nearly all stations. ORSANCO biologists hypothesized that scores may have appeared 'normal' since flows remained elevated from early spring through the time of sampling, forcing fish communities to acclimate to the conditions. Therefore, short-term flow fluctuations may have a greater effect on index scores than long-term elevated flow conditions. Overall, despite the abnormal conditions, each pool was assessed as meeting its aquatic life use, with no in-season site revisits necessary.

Development of Macroinvertebrate Index

The 2012 data, received in early 2013, indicate that macroinvertebrate index scores responded as expected to the water and sediment chemistry parameters it was developed against. To further add to the validation data set, the additional water and sediment parameters were collected in conjunction with the macroinvertebrate sites in Smithland thanks to funding provided via the USACE Louisville.

Additionally, this collaboration allowed ORSANCO crews to conduct an over-sampling exercise for macroinvertebrates in the Smithland pool in 2013, sampling at a total of 30 sites by adding the 15 probabilistic sites from 2008 to that of 2013. These data have yet to be returned, but will be used to confirm that 15 sites is an adequate number to achieve a consistent assessment of condition. The 2012 data further exhibited the general agreement between assessments of pools using fish and macroinvertebrate indices. However, to prepare for when this is not the case, members of the BWQSC were polled to determine how states with multiple indicators address conflicting assessments. The results of that discussion was that most basin states list an assessment unit as impaired if one of the two indicators suggests impairment (though all associated abiotic and biotic data is considered prior to final listing).

Recommendations

The BWQSC recommended that all 2013 pools (Dashields, Hannibal, R.C. Byrd, and Smithland) be assessed as meeting their designated Aquatic Life Use, based only upon fish assemblages. The subcommittee also recommended continued validation of the Ohio River Macroinvertebrate Index through the 2014 field season and consideration of its inclusion as a second biological indicator for the 2016 305(b) report. The 2016 report was chosen due to lag time of not expecting 2015 macroinvertebrate samples until early in 2016. Therefore the report would only include the most recent paired fish and macroinvertebrate data (i.e. excluding the 2015 fish data from the 2016 report). Furthermore, the committee recommended that we follow the lead of the majority of the Ohio River main stem states, and assess any pool with the 15 site average of *either index* scoring below the threshold of 20 as being impaired. This decision should be made after ensuring that no qualifications were assigned to either index and that any additional abiotic data was considered.

The committee also suggested that we coordinate with USEPA, Corvallis (prior to the 2015 surveys) to consider implementing a new probabilistic design that might eliminate or minimize the sporadic "clumping" effect in pools in which large sections of a pool do not contain a sampling location. Lastly, the BWQSC recommended that staff should target fish and macroinvertebrate sampling in four pools in 2014, prioritized in the following order: Belleville, McAlpine, Olmsted/Open Water and, as resources allow, Markland.

ACTION: Motion passed to accept the four 2013 biological pool assessments.

Overview of National Water Quality Monitoring Council Products

The National Water Quality Monitoring Council is a vehicle for bringing together diverse expertise needed to develop collaborative, comparable, and cost-effective approaches for monitoring and assessing our Nation's water quality. The Council is made up of approximately 30 members comprised of federal and state agencies as well as several other entities such as interstate basin commissions. Among other workgroups and products of the Council, The National Environmental Methods Index (NEMI) and the Water Quality Portal (WQP) are of potential interest to ORSANCO and its member states. The WQP is an on-line interface that allows seamless data retrieval from both STORET and USGS's NWIS. NEMI is a web-based database of 1220 (and growing) biological, chemical, physical, statistical, and toxicity assay methods used by entities across the country.

Ohio River Basin Fish Habitat Partnership

The Ohio River Basin Fish Habitat Partnership has recently completed a data-driven assessment of the aquatic habitat of the entire Ohio River basin using statistical models incorporating seven unique response variables. One result of these assessments has been to identify Priority Action Areas across the basin for the ORBFHP. More recently, two additional smaller scale models have been completed for the Licking River (KY) and the Muskingum River (OH) basins. The results of all models include predictions of current conditions for every stream segment in the study area, relative influence of predictor variables on each response variable, individual relationships of each predictor variable to each response variable, and indices of combined anthropogenic stress and natural habitat quality. Using these products, a desktop-based decision support tool has been developed which allows users to visualize the current conditions of any given area in the basin, to rank areas at different scales based on pre-determined conditions, and to predict effects of landscape scale changes on given response variables.

ORSANCO is currently acting as a pass-through agency for USFWS to coordinate with Downstream Strategies to make this decision support tool available as a web-based application. Draft reports developed as part of this relationship will be distributed to the Technical Committee and Commissioners for their review and acceptance prior to releasing any final reports.

Technical Approach for Fish Tissue Mercury Trends Analysis

Rob Tewes reported that a comprehensive analysis of mercury trends in fish tissue is warranted at this time as recent air emission regulations could ultimately be responsible for directing more mercury into waterways. Additionally, mixing zones for bioaccumulating contaminants of concern, like mercury, are in the process of being eliminated on the Ohio River, potentially affecting permit renewals for many Ohio River dischargers. In addition to fish tissue contaminant data ORSANCO has gathered over the last three decades, we have also compiled contaminant data from other agencies (FDA, USGS) from as early as 1983. We are conducting a data quality review to qualify all data to be used in comparisons and trend analyses. All data used in this investigation are derived from fillets only (not whole fish), multiple fish composites (unless otherwise noted) taken from fish of average size (within angling regulations unless otherwise noted) and multiple trophic levels, and analyzed using comparable methods with accompanying QAQC documentation. To date, we have 3120 samples (1983 – 2013) comprising 39 taxa. An extensive literature review is being conducted in conjunction with data qualification and analyses. ORSANCO hopes to address several questions:

- Is mercury in fish tissue increasing or decreasing spatially and or temporally within the Ohio River?
- What spatial and temporal trends exist and are they significant?
- How can we account for any observed trends?

This project has many unique challenges and analysis factors and will produce a number of specific endpoints. Preliminary analyses exhibit differences in Hg tissue concentration among different taxa, and trophic levels. Trophic level-specific trends in Hg concentration are seen with respect to river mile and average length of individual fish within a sample.

EPRI Methyl Mercury Modeling Project

Mr. Reash reported that a final report has been completed on a joint effort with American Electric Power and the Electric Power Research Institute on *Application of the Dynamic Mercury Cycling Model (D-MCM) to the Robert C. Byrd Navigation Pool of the Ohio River, 2013*. Because of the regulatory landscape regarding mercury in the Ohio River, this study was conducted to determine the relative importance of the different sources, determine the locations and extent to which methylation occurs in the Ohio River, and evaluate if mercury levels are increasing in fish. The D-MCM model was used which simulates mercury cycling and bioaccumulation in aquatic systems, and predicts responses to changes in mercury loading, environmental conditions and fish trophic levels. The project was conducted for the R.C. Byrd pool and subsequently the entire river upstream to the point in Pittsburgh.

Results indicate that sources of mercury in the R.C. Byrd pool are 80 percent from upstream sources, 19 percent from Kanawha River sources, and less than one percent from air deposition and point sources combined within the pool. Ninety-five percent of the total methyl mercury is from upstream sources and the model determined that methylation potential in the Ohio River is very low.

Nutrients

Trading Program Update

Greg Youngstrom provided an update on the Ohio River Basin Trading Project. The Pilot Trading Plan was amended in October, with the primary change being that only stewardship credits will be sold during the pilot period. ORSANCO hosted IN, KY and OH Ag and Permitting agencies for training on the Credit Registry. Finally, a media event is planned for March 11 to showcase the first trades under the Pilot.

USEPA Headquarters Numeric Nutrient Criteria Assistance Initiative

USEPA HQ has started visiting all 10 regions to provide assistance to states in developing nutrient criteria. Jason Heath, Greg Youngstrom and Ryan Argo attended the Region 5 meeting February 3-5. HQ has suggested that ORSANCO attempt to use Quantile Regression and Change Point analysis with our macroinvertebrate data. Staff presented some preliminary work with Quantile Regression that appears promising and identified the next steps needed to move forward with this method.

Work Plan for Utilization of $40,000 SEP Funds for Nutrient Criteria Development

ORSANCO received $40,000 from a WV SEP that is targeted for nutrient criteria development. ORSANCO has been seeking suggestions for how this money could best be spent to make progress on nutrient criteria. Suggestions included a "panel of experts" or a "Large Rivers Symposium". Staff will continue to collect ideas with the expectation that TEC will make a decision at the October 2014 meeting.

National Weather Service Ohio River Forecast Center Climate Change Analysis

Mr. Jim Noel with the National Weather Service provided an overview of the Ohio River Forecast Center's climate change predictions for flows in the Ohio River Basin for the present through 2040, 2041 through 2070, and 2071 through 2099.

A summary of prediction results is as follows:

- Flows will generally be within the range of history through 2040 except during the autumn season when large increases in maximum flows may occur north of the Ohio River and in the eastern basin.
- Beyond 2040, increases of ten to forty percent occur in mean and maximum flows.
- Minimum flows decrease especially during the 2041-2070 period.
- Spring flooding increases especially beyond 2040.
- Current flow conditions (1976-present) are likely to persist through 2040.
- Spring flooding may worsen beyond 2040.
- Droughts could lengthen beyond 2040.
- Variability in flows is likely to increase over time.

Source Water Protection Activities

Elk River Spill and the Organics Detection System

Lila Ziolkowski gave a presentation demonstrating the use of ODS instrumentation during the 4-MCHM spill into the Elk River. Instrumentation included older instrumentation at non-renovated sites, which had higher limits of detection (100 ppb), and newer instrumentation, which provided the ability to monitor more frequently and at lower levels (5-50 ppb) to detect the presence of this particular compound. A brief discussion comparing and contrasting different types of instrumentation in the ODS system was given.

Of significance is that this chemical is not found in ORSANCO's list of routinely monitored compounds and there are no USEPA regulations or analytical methods with respect to monitoring for this compound. A method had to be (quickly) devised to detect this chemical using Safety Data Sheet (SDS) information. Identification and quantification would have to be performed on gas chromatograph (GC) systems. On Gas Chromatograph/Mass Spectrometer systems (GCMS) chemical fragmentation patterns could be compared against those contained in the NIST library on the GCMS for a qualitative identification. Crude (raw) product was obtained for ORSANCO to use to set up a calibration curve for quantitative estimations. Pure chemical standard was later obtained by downstream sites that had more time to prepare. Differences in detection limits were influenced by a variety of factors including ability to heat sample prior to injection, use of crude or pure standard, degradation of crude product, and velocity of spill and proximity to downstream utility.

ODS sites involved in active monitoring of 4-MCHM included St. Albans, Huntington, Portsmouth, Ashland, Maysville, Cincinnati, Louisville and Evansville (half of all ODS stations). ODS instrumentation detected concentrations of greater than 100 ppb in the Kanawha River to around 3 ppb at Louisville (downstream travel).

Another key component of the ODS is communication and dissemination of information to downstream utilities so they are able to make appropriate treatment decisions in order to protect their consumers. Frequent communication via email, text, phone, and positioning an incident command center at ORSANCO facilitated this effort. Remote access into ODS stations allowed staff to view data acquisitions and provide preliminary estimations.

Finally, hydrologic modeling was used to predict time of travel estimates of the 4-MCHM to downstream utilities, which was based on detections provided by the ODS. Predicted arrival to intake time and actual intake arrival time were very close because of the robust data set collected.

The Technical Committee also viewed a video being developed about the Organics Detection System.

Integrated Pool Assessments

A report was presented on the supplemental analysis of 2005-2009 Integrated Assessment Program surveys and biological assessments. The analysis shows that correlations between water quality results and biological assessments are strongest when temporal disparity is reduced between the two assessments. Most water quality parameters with significant correlations to mORFIn index scores have a positive correlation indicating higher pollutant concentrations correlate with better biological assessment scores. Future efforts to integrate water quality data with biological assessments should account for these findings by scheduling concurrent assessments. Technical Committee comments on this project report were requested by April 15, 2014.

FGD Sampling Study Results

A report was presented on the Investigation of Mercury Discharges from Flue Gas Desulfurization (FGD) Systems. The monitoring of mercury, methyl mercury, selenium, and bromide shows that methyl mercury is not increased in relation to ambient Ohio River water in FGD systems. In addition, the discharge mass of total mercury from a power plant's final effluent was not consistently greater than the mercury load taken in from the Ohio River for the plant's process purposes. Technical Committee comments on this project report were requested by April 15, 2014.

Results of Broad Scan Project

A report was presented on the Broad Scan for Unmonitored Pollutants with Water Quality Criteria. The project analyzed the Ohio River in three locations at high and low flow for 112 of the 126 pollutants with water quality criteria. Results of the monitoring project show that the many organic chemicals contained in ORSANCO Pollution Control Standards are not detectable in the Ohio River in high or low flow conditions. In addition, all detected concentrations found during the study were from routinely monitored pollutants. Technical Committee comments on this project report were requested by April 15, 2014.

Status of Axiall Variance Requirements

As required by Axiall's variance, they are required to develop and implement a water quality and fish tissue monitoring program, as well as annual status reports on implementation of their mercury minimization plan. ORSANCO has received the water quality and fish tissue monitoring plans and worked with Axiall on several modifications. ORSANCO's remaining concern on the water quality monitoring plan involves the ability to collect depth-integrated samples under all reasonable flow regimes. ORSANCO is currently reviewing the fish tissue monitoring plan and may submit comments to Axiall before monitoring begins later in the year. Staff also provided a summary of Axiall's implementation of their mercury minimization plan. TEC directed staff to communicate directly with WVDEP staff on these issues to obtain any input they might have.

Member Updates and Interstate Water Quality Issues

Indiana

Ms. Selvaratnam reported that Indiana is currently conducting a water quality standards review and is working on revisions to its metals and nutrients criteria on a statewide basis. They are using the BLM model to update the copper criteria.

Kentucky

Mr. Payne reported that Kentucky has received approval for its water quality standards which included narrative standards for nutrients. USEPA approved their chronic criterion for selenium but not the acute selenium criterion. A complaint was filed with USEPA's approval of the selenium criterion which cited administrative issues and questioned whether the criterion would be protective of all aquatic species. They will be focusing on the Salt and Licking River Basins for monitoring in 2014, and they are beginning to integrate mussels into their monitoring programs. Asiatic clams will be collected and the tissue analyzed for selected pollutants. They are working with the Corps of Engineers on Harmful Algal Blooms and the use of remote sensing data to address the issue. Kentucky will be following USEPA's work on criteria development for selenium, conductivity and chloride.

United States Army Corps of Engineers

Ms. Lee noted that the National Weather Service climate change study was funded by the Corps. The overall goal of the climate change work is for future planning of operations, maintenance, and rehabilitation of their water resource infrastructure responsibilities and the management of ecosystems. They are working on an initiative with the Institute for Water Resources called the Future Direction of Civil Works which is looking at the future direction of water resources initiatives. They are also piloting a watershed-based budgeting process. They have also reached out to stakeholders including the ORSANCO Water Resources Committee, the Ohio River Basin Alliance, and others, to investigate if shared-vision planning would be of value. Stakeholders felt that it might be most valuable for drought preparedness, and it might be a good tool for the Corps watershed-based budgeting initiative (a report is published and available to the public). Regarding the Elk River spill, the Corps received inquiries as to their ability to modify reservoir operations to help with the spill such as increasing stream flows, however there are also concerns about not causing other problems by doing so, and no action was taken in regards to this spill. However, the Corps would like to work with ORSANCO to investigate their potential future role in spills mitigation activities. The Corps also continues to work with the states on harmful algal blooms to develop collaborative monitoring strategies and on advising the public.

United States Geological Survey

Mr. Griffin reported that the USGS recently released a new sediment data portal, which makes available online, suspended sediment data for rivers and streams at over 4900 sites for the past 100 years. They are also working with the private sector on the control of asian carp including the development of seismic water guns, algae attractants, and micro-particles. They have been working with the Indiana and Kentucky agriculture communities for the installation of real-time nitrate analyzers. There are several installed on major tributaries in Indiana and there is one installed at Olmstead to investigate what is leaving the Ohio River Basin. They are investigating installation of additional units on the Ohio River at Greenup, Kentucky and another on the Licking River, while one is installed on the Green River. All of this data is available online. They are working on a large rivers initiative in the Midwest involving a proof-of concept in ecosystem connectivity which is currently focused on the upper Mississippi River but the Ohio River will be included in the future. He reported that the USGS worked with ORSANCO and did some sampling of the Ohio River to support the Elk River spill. Mr. Griffin is currently the Acting Director for the Indiana and Kentucky Science Centers.

Pennsylvania
Mr. Schwartz reported that PADEP is tracking a new spill from a Norfolk Southern train derailment in Westmoreland County on the Allegheny River. Eighteen railcars overturned and there is a potential for a crude oil spill, but everything is being contained on site at this time.

Power Industry Advisory Committee
Mr. Reash reported on the coal combustion byproduct rule indicating that it will address two issues including what byproducts may be regulated as hazardous waste under RCRA, and whether regulation will occur at the state or federal level. The final rule is mandated to be issued by December 2014. The steam electric guidelines rule is scheduled to be finalized in late May. Under this rule, disposal of wet coal fly ash is expected to be phased out. The 316b fish entrainment/impingement rule was scheduled to be issued last November, but discussions on whether the rule will be protective of federally-endangered species has been questioned. It now is scheduled to be issued in mid-April.

Ohio
Mr. Novak reported that OEPA has public noticed a proposal to remove the human health thallium criterion from their water quality standards. Regarding nutrients, they have been working with an external advisory group and hope to have draft numeric nutrients criteria for streams proposed sometime in 2015. They recently released a draft 2014 305b integrated report on the status of Ohio's waters in terms of use attainment; however there is little change over the previous report. Approximately 90 percent of large rivers are in attainment, while about 60 percent of smaller streams are in attainment. Major causes of nonattainment include organic enrichment, habitat, and sediments. Regarding Dayton Power and Light's appeal of the Stuart Plant thermal limits, that process is moving forward and a hearing is anticipated for May, 2014. In addition, the Ormet facility that was an aluminum factory that discharged to the Ohio River has closed.

Water Users Advisory Committee
Mr. Whitteberry reported that the committee met last week, and not surprisingly, the main agenda item was the Elk River spill. The committee also will be following any legislation that may be proposed as a result of the Elk River spill. The committee thanked ORSANCO staff as well as all the other agencies that assisted in the spill. The committee continues to be concerned with bromide levels in the Ohio River and elsewhere, and continues to conduct special monitoring to address the issue.

West Virginia
Mr. Coyne reported that a bill regarding protections for above-ground tanks is going through their legislature. He thanked all involved for their assistance with the Elk River spill. WVDEP has been extremely busy dealing with the Elk River Spill as well as the coal slurry spill that occurred shortly thereafter. They are currently conducting a triennial review of their water quality standards. They are proposing nutrient criteria for lakes that address phosphorus and chlorophyll. Proposed revisions to their aluminum criteria will not be moving forward. They are proposing a site-specific criterion for zinc in the Fayetteville, WV area. They are planning a TMDL-type approach to nutrients to address algae problems in the Greenbrier River. Regarding monitoring, they are working on development of a fish IBI that could be paired with already developed benthic macroinvertebrate IBI that would create a new assessment approach for the state.

FY15 Technical Program Planning Recommendations

Jason Heath summarized the recommendations developed during the Technical Committee meeting pertaining to the FY15 technical program planning process as follows:

Biological Subcommittee

- Implement new probabilistic design in 2015 survey to minimize "clumping".
- Target 4 pools for biological surveys.
- Utilize new macroinvertebrate index in 2016 305b assessments.
- Indicate impairment if either fish or macroinvertebrate indices indicate impairment.
- Exclude 2015 biological data in 2016 305b assessments due to timing.

106 Supplemental Monitoring Program ($65K)

- Utilize remote sensing data to evaluate river-wide temperature conditions and inputs, and algae/chlorophyll-a if funding allows.

Spills/Emergency Response

- Update spills model.
- Look at upgrading/expanding ODS to handle additional pollutants; add new stations.

Mixing Zone Prohibition

- Activities needed to address mixing zone prohibition such as considering appropriateness of the prohibition, mercury criterion, etc.

Stream Criteria Subcommittee (on nutrients)

- Conduct more intensive assessments of macroinvertebrate/nutrients data.
- Work with EPA HQ to assess data for nutrients criteria development.
- Participate in EPA Region 3 Nutrients RTAG meetings.
- Provide recommendation to TEC regarding use of SEP funds for nutrients criteria development.

NPDES Subcommittee

- Recommend NPDES Subcommittee work with Standards Committee on streamlined mercury variance procedure.

305b

- Hold workgroup meeting.
- Continue collection of methyl mercury in fish tissue (2 samples for TL3 and TL4 in each of 4 biological pools annually).
- Consider new options, costs and funding for monitoring PCBs & dioxin to update 305b assessments.

ACTION: Motion passed to accept the above recommendations with the exception of the Biological Subcommittee recommendation regarding impairment decisions based on fish and macroinvertebrate results. This recommendation should be further vetted through the various committees to determine if it is appropriate or whether there should be an allowance for best professional judgment.

Next Meeting

The next meeting of the Technical Committee will be held June 10-11, 2014 at the Tropicana Evansville Executive Conference Center in Evansville, Indiana.

Adjournment

The 204th meeting of the ORSANCO Technical Committee was adjourned at 11:55am on February 13, 2014.

Approved:

Stuart Bruny, P.E.

Prepared by Jason Heath, P.E., BCEE with contribution from Ryan Argo, Sam Dinkins, Eben Hobbins, Jerry Schulte, Rob Tewes, Jeff Thomas, Greg Youngstrom, and Lila Ziolkowski.
(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 Stuart Bruny
Illinois	Not present
Indiana	Shivi Selvaratnam
Kentucky	Randy Payne
New York	Not present
Ohio	Paul Novak
Pennsylvania	Ron Schwartz
Virginia	Not present
West Virginia	Kevin Coyne
US Army Corps of Engineers	Debbie Lee
US Coast Guard	Not present
US EPA	Not present
US Geological Survey	Michael Griffin
Chemical Industry Committee	Not present
POTW Advisory Committee	Not present
Power Industry Advisory Committee	Rob Reash
Public Interest Advisory Committee	Betsy Mallison/Eriks Janelsins
Water Users Advisory Committee	Bruce Whitteberry
ORSANCO Chief Engineer	Peter Tennant
Staff Liaison	Jason Heath

Commissioners

Craig Butler, Doug Conroe, Chuck Duritsa, Tom Easterly, David Flannery, Toby Frevert, Ron Lovan, Phillip Morgan, Greg Phillips, Ron Potesta, Bruce Scott, Paul Tomes, Ross Wales (legal counsel), Mike Wilson

Staff

Ryan Argo, Dave Bailey, Steve Braun, Lisa Cochran, Stacey Cochran, Sam Dinkins, Tracey Edmonds, Joe Gilligan, Jason Heath, Eben Hobbins, Travis Luncan, Melissa Mann, Heather Mayfield (FORE), Jerry Schulte, Rob Tewes, Jeff Thomas, Greg Youngstrom, Lila Ziolkowski

Guests

Danny Cleves	Contractor
Pat Coyle	Duke Energy
Laura Factor	Ohio EPA
Cheryl Green	Hull & Associates, Inc.
John Hirschfield	Axiall Corp.
Jim Noel	National Weather Service
Mike Snyder	Shumaker, Loop & Kendrick, LLP
Jim Stieritz	Retired