MINUTES

205th Meeting of the Technical Committee Tropicana Executive Conference Center Evansville, Indiana June 10-11, 2014

Chairman Stuart Bruny, Presiding

Call to Order

The 205th meeting of the ORSANCO Technical Committee was called to order by Chairman Bruny at 1:00 pm (central) on Tuesday, June 10, 2014. Six states, three federal agencies, and three Commission advisory committees were represented. (for Roster of Attendance, see page 12).

Minutes of 204th Committee Meeting

ACTION: Motion passed to accept the minutes of the 204th Technical Committee meeting.

Chief Engineer's Report

Mr. Tennant welcomed Tim Henry with USEPA Region 5 back to the Technical Committee.

Mr. Tennant reported that Adam Scott has joined the staff, replacing John Klear as Computer Systems Administrator.

Regarding the trading program, the first three interstate trades have taken place under the EPRI Trading Program between electric power utilities and producers. A successful event was held in Cincinnati in recognition of the trades. Event speakers included Craig Butler and Tom Easterly, the event was attended by some congressional staffers, and it received recognition in the trade journals and national press. As a result, Mr. Tennant received an invitation to participate on a panel on trading in front of a congressional subcommittee.

The National Water Quality Monitoring Conference was held in Cincinnati. There were a number of presentations given by ORSANCO staff as well as ORSANCO states and it was great showcase for water quality initiatives in the Ohio Basin.

Mr. Tennant reported that there was an Elk River spill debriefing last week with participation by state and federal emergency response and source water protection personnel, as well as water utilities. There was great discussion on what was done well and what needs to be improved, and this will be discussed in more detail during this meeting.

Finally, Mr. Tennant reported that there were some minor delays in monitoring activities due to high water during this field season, but that all work was expected to be completed on schedule this year.

Technical Program for FY15

Staff presented an overview of the FY15 technical program and the status of recommendations by the Technical Committee developed during the February meeting. Activities in the areas of water quality monitoring and assessment, pollution control standards, water resources, source water protection and special projects for FY15 were presented. Most of the Technical Committee's recommendations were incorporated into the FY15 technical program with a few exceptions.

Recommendations that were not incorporated for budgetary reasons include monitoring for PCBs and dioxin to update the 305b report, and upgrades to spill modeling systems.

Report of the NPDES Subcommittee

Paul Novak provided a report of the NPDES Subcommittee who met by conference call on March 12 and May 7. The main item the committee discussed was the streamlined mercury variance procedure which the standards committee had decided not to adopt at this time. The NPDES Subcommittee believes that if the mixing zone prohibition stays in effect along with the current mercury water quality criterion, that there will be Ohio River discharges that need a variance. Regarding the states' sending letters notifying discharges of the pending the pending mixing zone prohibition and the ability to apply for a variance from ORSANCO, to date only Indiana has completed this. There are various reasons why the other states have not sent letters. The subcommittee received information on treatment technologies for mercury in landfill leachate from a coal-fired power plant. The American Electric Power Gavin plant has successfully treated its total mercury in landfill leachate down to 0.012 ug/L utilizing chemical precipitation followed by settling followed by vertical flow wetlands. The subcommittee is still working on a procedure to recommend for permitting of criteria that apply at downstream intakes. The general approach is to utilize some type of site-specific model such as CORMIX for new discharges or for discharges where the criterion is exceeded at the nearest downstream intake. For existing discharges where there are no problems with the criteria at the nearest downstream intake, the state can simply follow its existing procedures. A more formal recommendation on this issue will be forthcoming.

Report of the Monitoring Strategy Subcommittee

Jason Heath provided a report of the Monitoring Strategy Subcommittee that met by conference call on May 9, 2014. The purpose of the call was to initiate a comprehensive review of all of ORSANCO's monitoring programs, but initially focusing on bimonthly and clean metals monitoring programs. These monitoring programs have been ongoing for quite a few years. The data is used for status and trends assessments. With the exception of total mercury samples, there are very few water quality criteria violations ever observed. This monitoring is conducted at fifteen mainstem locations every other month. Questions include whether the sampling frequency is correct, if five-year rotating intensive pool surveys would be a better approach than routine fixed station monitoring, if flow weighted sampling would be preferable to grab samples, and whether the correct parameters are included in the analytical suite. For long-term trends analyses, the subcommittee indicated that bimonthly sampling was not sufficient. The USGS indicated that more than monthly sampling is necessary for trends analyses. The subcommittee is tentatively scheduled to meet later this fall.

Report of the Stream Criteria Subcommittee

Bob Mosher provided a report of the Stream Criteria Subcommittee who met by conference call on April 21 to discuss issues under consideration in the Pollution Control Standards revision. The subcommittee agreed that definitions for duration and frequency are needed and that staff should consult with the NPDES Subcommittee on the needs of permitting as well as summarizing what each of the states has for definitions. The subcommittee noted that USEPA's total mercury criterion document developed in the 1980's is not clear in many areas. Some states are currently using different criteria than ORSANCO's total mercury criterion of 0.012 ug/L. Regarding re-evaluation of the total dissolved solids criterion, the subcommittee again recommends discussing with the NPDES Subcommittee to determine if discharges are receiving effluent limits and if those limits are a problem. Regarding E. coli, the subcommittee recommends waiting for USEPA to issue implementation guidance on their new recommended criteria before moving forward to adopt those criteria. Regarding USEPA's new recommended ammonia criteria which is significantly more stringent than the previous criteria, it probably should not be a problem for the Ohio River due to the available mixing capacity of the river, however the subcommittee is recommending that ORSANCO wait to see what if its member states adopt the criterion before moving forward with a new criterion. Since no states currently have

numeric criteria for nutrients, the subcommittee is recommending that ORSANCO continue to conduct monitoring for the future development of criteria. The US EPA has issued new criteria for selenium, however the subcommittee recommends that ORSANCO to wait and see what its member states decide.

Review of Pollution Control Standards

Staff presented an overview of each of the issues identified for the standards review for the purpose of receiving TEC's input. A summary of all public comments received during the initial public comment period was provided with the Commission agenda. The following is a summary of TEC's input on the issues under review:

It was suggested that staff investigate what other large river systems have the mixing zone ban for BCCs and why.

Regarding the appropriateness of the total mercury water quality criterion, it was suggested that the fish tissue methyl mercury criterion of 0.3 mg/kg could be utilized for discharger compliance instead of the water quality criterion that is in question.

Regarding total dissolved solids, TEC recommends investigating OEPA's work on aquatic life criteria for TDS. In addition, staff should investigate the impacts on discharges, water intakes, and aquatic life due to either keeping or dropping the TDS criterion.

Regarding the USEPA's new recommended ammonia criteria, TEC recommends that staff investigate the availability of the frequency and distribution of mussels in the Ohio River (from the DNR's), as well as investigating the US Fish & Wildlife Service's recommendations.

TEC recommends that staff investigate the NRC's regulations regarding radionuclides, as well as finished water regulations.

TEC does not believe that criteria should be set as "below detection level."

TEC believes that the issue of requiring surety bonds for shippers of fracing waste is outside the scope of the standards.

TEC believes there is currently not enough data available to recommend a bromide criterion.

Regarding thallium there is a need to determine USEPA's position as well as OEPA's position on the criterion.

TEC recommends investigating the USGS's approach to development of criteria for metals for the protection of aquatic life.

TEC recommends there is no need to extend the "no net discharge" provision to POTWs.

TEC recommends that staff consider the implications of changing the language from "months" to "periods" in the section on Clarification of Uses.

TEC recommends not changing the section on analytical methods to only refer to USEPA approved methods.

TEC recommends not changing the use of the "variance" terminology.

General comments that all criteria should be protective of mussels and that all criteria should align with the USEPA's recommended criteria should be forwarded to the standards committee.

There were two formal actions by TEC on the standards review, as follows:

- **ACTION:** TEC recommends that review/revision of the E. coli criteria be deferred to a future standards review (USEPA abstained).
- **<u>ACTION</u>**: TEC believes that the intent of the 110 deg F criterion for the protection of human health was to apply anywhere that public access is possible, both inside and outside the mixing zone.

Staff provided an overview of a position paper developed by the Pollution Control Standards Committee on the need for a streamlined mercury variance procedure, which was included with the Commission agenda package. The position paper recommends against development of a streamlined procedure due to the lack of need at this time. The rationale for the lack of need at this time is fully discussed in the paper.

Evansville Water & Sewer Utility CSO Long-Term Control Plan

Mike Labitzke, Deputy Director, provided an overview of the status of the City of Evansville's CSO Integrated Overflow Control Plan. He reported that a federal consent decree was finalized in June 2011 which requires the long-term control plan to be completed within 20 years, or 25 years if the costs exceed two percent of the median household income.

The city has two wastewater treatment plants and 833 miles of sewer, of which sixty percent are combined sewers. There are twenty two CSO outfalls with an annual average overflow volume of two billion gallons which typically occurs during 50 days of CSO activation. One of the unique challenges with Evansville is that it discharges greater CSO volumes than many much larger municipalities, thus creating a significant financial issue. One unique challenge is with Bee Slough which receives seventy percent of the total CSO volume going to the Ohio River. They are proposing a constructed wetland within the levee to address Bee Slough overflows, but this project has not yet been approved by USEPA. Specifics of the control plan include a constructed wetland to treat Bee Slough overflows, maximizing underutilized existing infrastructure, incorporation of "green technology" wherever possible, optimizing the Pigeon Creek sewer main, installation of better controls at the treatment plants, reduction of storm water entering the separate sewers, and providing backup power for lift stations. There are significant financial problems associated with meeting USEPA's requirements. The city is currently proposing to spend \$373 million during the first twenty years and an additional \$167 million in the following eight years. These expenditures will result in a significant financial burden for ratepayers. Their final plan was submitted to USEPA, the US Department of Justice, and IDEM on May 31, 2014; however the timeline for regulators to respond is unclear at this time.

Approval of Three Draft Reports

Three draft reports were included with the TEC agenda to be considered for approval: Broad Scan Survey for Unmonitored Pollutants, Investigation of Mercury from Flue Gas Desulfurization Discharges, and Integrated Assessment Program Supplemental Analysis. These reports were provided to TEC at the previous meeting, comments have been received, and the reports have been updated.

<u>ACTION</u>: TEC recommends approval of all three reports.

Report of the 305b Work Group

The 2014 305b Report has been reviewed, comments have been received, and the updated report was included with the TEC agenda. The assessments within the report were approved by TEC at the previous meeting. TEC is being asked to consider approving the report as included with the agenda.

ACTION: TEC recommends approval of the 2014 305b Report (USEPA abstained).

In addition, a protocol for Use of External Data for 305(b) Biennial Assessments has been reviewed by TEC, comments incorporated, and a revised draft included with the TEC agenda. TEC is being asked to consider approval of the protocol.

ACTION: TEC recommends approval of the protocol for Use of External Data for 305(b) Biennial Assessments.

TEC also recommended that the issue be included on the next meeting agenda to discuss extension of the protocol to other ORSANCO programs.

Report of the Fish Consumption Work Group

The Ohio River Fish Consumption Advisory Workgroup met via conference call on May 7, 2014 led by ORSANCO staff biologist Rob Tewes. Several topics regarding a wide variety of subjects were covered during the call. New members from OEPA (Gary Klase) and INDOH (Megan Meade) were welcomed to the workgroup. The Ohio River Fish Consumption Advisory Protocol was discussed and a status update regarding MOU signatures indicated that 4 of the 6 states have signed. Illinois is currently reviving an attempt to have the MOU signed. Pennsylvania is delayed by frequent administration changes. The primary purpose of the call was to present data from 2013 samples in the context of proposed fish consumption advisory modifications to the group for discussion and approval. Several other topics were covered. A draft fish consumption questionnaire was presented for comment. The questionnaire is a very informal (non-statistical) survey that ORSANCO biologists plan on using at mobile aquarium displays to gather anecdotal information from throughout the basin that will help guide future fish tissue sample collections and may be used to inform future statistical surveys developed for the river.

Based on input at the February Technical Committee meeting, staff compared PCB data in Ohio River fish tissue to a criterion used by Indiana for 305(b) assessments. The result was that 1537 of 1559 Ohio River samples exceed the 0.02 ppm criterion, indicating that fish tissue data corroborates the river-wide PCB impairment of the fish consumption use in place due to aging water column data. A brief discussion was held to determine if the members of the workgroup would consider having Ohio River fish analyzed for methyl mercury (MeHg) and then estimating total mercury concentrations to determine advisories, since ORSANCO's 305(b) committee requires MeHg data, and eliminating total Hg analyses would reduce program costs. The workgroup decided more paired MeHg and total Hg data were necessary before this decision could be made. Additionally, in an attempt to minimize fish mortality, a very brief discussion was held to gather information regarding the feasibility of exploring non-lethal methods (tissue plugs or serum) versus fillets. Finally, the group reviewed the status of the mercury in fish tissue trends study. Analyses at this point revealed differences among species, trophic level groups, and location along the river. These factors, coupled with an analytical methodology change (with potentially significant differences) combine to make answering the question of whether mercury is increasing in Ohio River fish tissue a difficult one to answer. Data explorations at this point indicate that mercury concentrations in some species may have increased over the

1983-2008 time period, but for most it has remained level or even slightly decreased. Final analyses and a summary report will be forthcoming.

Methyl Mercury Bioaccumulation Study

Staff provided a summary of a methyl mercury bioaccumulation study that was conducted over a oneyear period near Hannibal locks and dam in the vicinity of the facility granted a variance from ORSANCO's mixing zone prohibition. The study shows bioaccumulation factors higher than those of the USEPA Draft National Bioaccumulation Factors (2001 Methyl Mercury Criterion, Appendix A, Section 1). The higher bioaccumulation factors indicate a risk for mercury concentrations in fish tissue to exceed the 0.3 mg/kg water quality criterion at geometric mean aqueous concentrations of total mercury less than the Commission's current criterion of 0.012 ug/L for total mercury in water. The study proved comparable to earlier Commission work comparing total mercury in large hybrid striped bass tissue with total mercury water data. The information may be used to evaluate the Commission's current water quality criterion for total mercury.

TEC recommends that the written report be completed and peer reviewed. In addition, another study in a different pool should be placed on the Commission's list as a top priority for unfunded projects. Staff should also complete an analysis of all historic data where there is total mercury water data paired with fish tissue methyl mercury data.

<u>ACTION</u>: TEC recommends that the bioaccumulation study be replicated in another pool as soon as possible and that funding be obtained to do so.

Ohio River Bacteria TMDL Update

Jean Chruscicki, USEPA Region 5, provided an update on the status of the Ohio River bacteria TMDL. A TMDL is necessary because approximately two-thirds of the river is impaired due to bacteria. ORSANCO maintains all the project documentation on its webpage. Since the project was initiated, a major change has been to use the Corp's HEC-RAS model for flows and water quality. Ms. Chruscicki also presented many examples of the data analyses that have been conducted to support the analyses.

Currently, the HEC-RAS model is in the calibration phase which must be sufficiently accurate in comparison to actual data prior to running the model to generate TMDLs. The TMDL is being conducted for the mainstem only such that tributaries will be treated as point and nonpoint sources. MS4s will be given wasteload allocations. It is anticipated that a draft report will be available in 2015.

Water Resources Update

Sam Dinkins noted that two draft reports were recently completed as part of the Water Resources Initiative. The first report details the current status of shale gas development activities in the Ohio River Basin and the potential impacts on water resources. The second report quantifies existing interbasin water transfers (IBTs) and characterizes state and regional IBT policies in the Basin. Both drafts will be presented at the upcoming Water Resources Committee on June 24, 2014.

Remaining deliverables for the Water Resources Initiative include a report on potential impacts of climate change on water resources and a report outlining a recommended strategy for ORSANCO to engage in water resource activities in the future. Current funding will likely be consumed by the end of 2014 and will support only one additional Water Resources Committee meeting in FY15.

Staff has also been very actively involved in the coordination of two stakeholder engagements as part of the Integrated Water Resources Science & Services (IWRSS) initiative. IWRSS is a joint effort of NOAA, USGS, and USACE to address water resource issues through improved collaboration. The purpose of the meetings will be to bring together a diverse group of stakeholders to prioritize water resource issues in the Ohio River Basin, identify data gaps and information needs, and propose possible projects that the IWRSS partners could work collaboratively to address. The first IWRSS meeting will be held in Cincinnati at US EPA's Breidenbach Environmental Research Center on June 25. A second meeting will be held the following day at the Cumberland River Compact office in Nashville, TN.

Source Water Protection Program Update

Jerry Schulte reported on his participation in two recent source water protection meetings convened for USEPA R-5 and USEPA R-3 states. Concerns regarding the recent drastic increase in Bakken oil shipments by rail were featured topics of both meetings.

Regarding ORSANCO's spill response resources, Jerry identified the need to upgrade the Commission's Ohio River spill time of travel model. The current model will soon be obsolete due to the changes that are forthcoming in the input format for the Corps flow data. The current input data set, Cascade, is being phased out by the Corps, and replaced by the new interagency HEC-RAS model. In addition, staff has identified many shortcomings and operational problems with the current Ohio River model, developed over 15 years ago. As such, it seems appropriate that the model be upgraded along with the data input template.

Staff briefed the committee on the status of the Commission's spill model and identified modeling needs to improve current capabilities. ORSANCO's spill model was developed in 2000 and is based on the USGS Branched Lagrangian Transport Model (BLTM). The model predicts plume time-of-travel and estimates pollutant concentrations. The recent spill on the Elk River near Charleston, WV highlighted some deficiencies with the current model design. Issued identified include:

- 1) The model currently utilizes the USACE CASCADE model for the flow input; however, CASCADE is being phased out and will be replaced by the Ohio River HEC-RAS Community Model.
- 2) The model has several bugs which must be worked around and cause unnecessary delays in running the model (e.g. does not model river miles 910 to 950).
- 3) Model runs have a limited spatial extent which requires numerous iterative model runs to be completed in order to predict time-of-travel significant distances from initial spill location.
- 4) Model inputs and outputs are cumbersome to work which delay model run setup and dissemination of results.
- 5) The model is limited to the Ohio River mainstem and does not predict time-of-travel on tributaries.

Staff has been in contact with the original model designers and the USACE to evaluate possible remedies. Funding to upgrade the existing model is not in the current FY15 budget, but staff will explore potential funding options.

Jim Goodrich, Director of the Water Infrastructure Protection Division, USEPA/ORD/NHSRC at the Cincinnati Breidenbach research center has offered to include the upgrade of the ORSANCO spill model as a project element in the Office of Research and Development's Homeland Security Research Program. The project would be accomplished over the next 2 – 3 years, culminating in not only an upgrade to the current spill model, but, additionally, in the development of an on-line, GIS-based, Ohio River Basin Emergency Management Tool for Drinking Water Security. This Tool would combine and make available in a single platform, geo-referenced data on potential contaminant sources found in the Ohio River basin as available through existing programs, i.e., EPCRA Title II, along with links to health effects information sources, i.e., ToxNet, and available treatment information. As an on-line support tool, drinking water utilities, agency personnel, etc, would be able to calculate times of travel as needed, including options for tributary travel time, something the current model lacks.

This product would also represent a significant improvement to the current scenario where only one staff member, Sam Dinkins, has the training needed to operate the Commission's Ohio River spill model.

Bruce Whitteberry, chairman of the Water Users Advisory Committee commented that the water users advisory committee had discussed at length the desirability of working with USEPA in the development of this drinking water security tool, and requests that the Commission support the initiative.

<u>ACTION</u>: TEC supports the water Users Advisory Committee recommendation to update the spill model and to develop an emergency response management tool.

<u>Ohio River Basin Fish Habitat Partnership Update and Decision Support Tool for Habitat Assessments</u>

ORSANCO is currently acting as a pass-through agency for a \$170,000 USFWS-funded project to develop a web-based GIS visualization and support application for aquatic habitat assessment management scenarios. With input from several fish habitat partnerships across the Midwest, the contractors are constructing an application comprised of three different tools that will be made publicly available via the internet. The first tool will allow users to visualize current landscape conditions for a given location at any scale of interest. The second tool will allow users to highlight priority action areas by ranking areas of interest at various spatial scales according to landscape factor values and habitat assessment model results. The third tool will enable users to estimate effects of landscape changes on response variables of interest.

Moving forward with habitat assessment modeling has recently been recognized as an important component of FHP activities by the National Fish Habitat Partnership (NFHP). Using a new performance-based funding allocation strategy employed by NFHP, the ORBFHP was the only recognized partnership in the country to reach Level 3, which was the highest level possible. This achievement was due, in large part, to the data- driven habitat assessments that were used to identify priority action areas across the basin. The result was an increase from the typical \$60,000 - \$90,000 allocated to the ORBFHP for aquatic habitat and water quality improvements to \$300,000 for the current funding year.

<u>Nutrients</u>

Staff presented an update to the Ohio River Basin Trading Project. The first trades were completed in March, 2014. These trades were "over the counter" but future trades are expected to be by auction. The Technical Committee asked that staff make sure EPRI knows that ORSANCO does not intend to take over management of the Project when it transitions to full time.

Staff presented a proposed change to the Nutrients/Algae sampling. The current sampling started in 1999. There is sufficient data collected to allow for analysis that targets the Public Water Supply and Contact Recreation designated uses. Staff proposed to focus the resources on funding that would target the Aquatic Life designated use. This would involve collecting continuous dissolved oxygen from the macroinvertebrate sampling sites over the next two years. This could be accomplished with current funding sources.

The Technical Committee endorsed the proposed change with the recommendation that we also investigate adding pH to our sampling. Purchase of DO monitors for all macroinvertebrate sites requires the use of West Virginia SEP funds that have been earmarked for the development of nutrient criteria.

<u>ACTION</u>: TEC recommends use of the West Virginia SEP funds to carry out the proposed monitoring program for the purpose of developing numeric nutrient criteria.

Staff gave an update on the Gulf of Mexico Hypoxia Task Force. The Task Force updated its Action Plan in 2013. In this Action Plan ORSANCO was designated a full member of the Task Force. Also, a meeting was held in May 2014 in Little Rock, Arkansas, at which it was announced that the Task Force had signed an MOU with the Land Grant Universities. The LGU's will help with the science of Best Management Practices and on educational outreach.

Wabash River Project

Staff presented the year-end report of the Wabash River Project. The project began in July 2010 and will conclude in January 2015. The goals of this project are to calculate the nutrient load of the Wabash River and determine if it the cause of dissolved oxygen problems in the Smithland Pool of the Ohio River. For the first goal, results from 2013 indicate that the Wabash River continues to be a major source of nutrients to the Ohio River. At the confluence the Wabash River contributes 40% of the nitrogen and 35% of the phosphorus load. For the second goal, there were no violations of the DO standard on the Ohio River in 2013. However, the Wabash River continues to have a large BOD load which has been identified as a potential cause of DO problems in the Smithland Pool.

Variances

Staff reported that comments on Axiall's water and fish tissue monitoring programs to support their variance have been developed and submitted in conjunction with WVDEP staff. In addition, ORSANCO has received another variance request from the FirstEnergy Pleasants Power Station in Willow Island, WV. Staff is currently reviewing the application.

Member Updates and Interstate Water Quality Issues

United States Army Corps of Engineers

Erich Emery reported that the Corp's is working on a remote sensing pilot project in Harsha Lake and Taylorsville Lake where satellite hyper-spectral data is compared to fly-over data and boat-collected data for chlorophyll. They are working with the USEPA ORD, NOAA, and USGS under a NASA grant looking at standardizing satellite data and utilizing it in cell phone applications. They continue to work with the Ohio River Basin Alliance team on a climate change pilot project which should be finalized this fall. They are also working with state agencies on developing protocols for addressing harmful algae blooms. Finally, Lake Cumberland has been returned to normal water levels after a long period of repairing the Wolf Creek Dam.

Indiana

Ms. Selvaratnam reported that Indiana is currently working on revisions to its aquatic life and human health ambient water quality criteria for waters outside the Great Lakes. Indiana has two sets of standards, one set for the Great Lakes and one set for outside the Great Lakes. Their goals is to adopt current USEPA-recommended 304a criteria, however there does seem to be a few issues with adopting all of those criteria.

Kentucky

Mr. Payne reported that the USEPA has a public comment period open until Friday (June 13) on its proposed national recommended criteria for selenium. This recommendation is very close to Kentucky's sit-specific criteria for selenium. Kentucky's coal general permits for the eastern and western coalfields went out for public review and comment on May 15. A public hearing will be held on June 18 and written comments are due July 2. Kentucky is conducting a special study of nutrients in the Bluegrass region for wadable and headwater streams investigating nutrient concentration responses for different land uses. Harmful algal bloom advisories have been issued for Green River reservoirs as well as Taylorsville Lake, and KYDOW is working with the Corps on this issue.

United States Geological Survey

Mr. Griffin reported that the USGS is making additional data on their website including continuous nitrate monitoring data. A new continuous nitrate monitor has just been installed on the Licking River and will be operational shortly. There is a new USGS website called Streamer that is a GIS-based system to allow users to check stream traces on America's largest rivers. The National Climate Change Viewer is another website which will allow users to look at climate-driven impacts in watersheds on multiple scales. A new flow gage has been installed on the Ohio River in Louisville, in partnership with Louisville MSD and the Corps. Lastly, Mr. Griffin reported that this year marks the 125th anniversary of the first stream gage installation in Santa Fe, New Mexico, on the Rio Grand River.

Pennsylvania

Mr. Schwartz reported that ORSANCO's water resources cooperative agreement is currently in the Governor's office for signature. PADEP submitted formal comments on ORSANCO's standards review. The was a March settlement agreement between USEPA with Alpha Resources, which has multiple mining operations in several states, to resolve NPDES permit violations and significantly reduce TDS loads. In addition to a civil penalty of \$27.5 million, they will be spending \$200 million to install wastewater treatment systems. Mr. Schwartz indicated that they have completed a white paper from a recent bromide study which shows an overall decline in bromide levels in the watershed studied and a corresponding decrease in brominated compounds in finished drinking water.

Power Industry Advisory Committee

Ms. Budzinski reported that on May 19, the 316b rules were issued. The power industry seems not to have concerns with the rule as they seem to provide adequate flexibility for the regulated community. On June 2, the Clean Air Act greenhouse rules were issued, and they may have a significant impact on coal-fired power plants. Finally, on June 25th, the Zimmer power station will be hosting a meeting on wastewater treatment which will have a focus on mercury treatment technologies. Ms. Budzinski extended an offer to ORSANCO to attend the meeting.

Ohio

Mr. Novak reported that OEPA has public noticed a proposal to remove it human health thallium criterion from their water quality standards, and a hearing was scheduled for June 9. 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 have been addressing high TDS discharges from salt storage facilities on the Ohio River. The Kinder Morgan facility downstream of Cincinnati just received a permit which requires them to minimize the impacts and divert high TDS discharges to Cincinnati MSD for treatment. The Gavin power plant NPDES permit was recently issued as well as a permit to install for expansion of their FGD landfill. The OVEC power plant is considering closing its fly ash ponds and converting to a dry ash handling system. Finally, there is an administrative hearing scheduled for late August on the temperature issues at the DP&L Stuart Station.

USEPA

Tim Henry reported that USEPA has proposed revisions to 94 human health criteria, based on a number of updated factors, which are currently out for public comment until mid-July. Yesterday, the President signed the Water Resources Reform and Development Act. USEPA water directors will be briefed on it next week and Mr. Henry offered to share relevant information from that briefing. The USEPA ORD has scheduled a webinar on harmful algal blooms for June 25th. Lastly draft permits have recently been issued for four Class VI underground injection wells to control atmospheric carbon emissions at the planned FutureGen Alliance power plant.

Water Users Advisory Committee

Mr. Whitteberry reiterated the committee's interest in the development of an emergency management GIS tool which was discussed in depth earlier during the meeting, as well as the committee's continued interest in the bromide issue.

West Virginia

Mr. Mandirola reported that there are four emergency rules before the next legislative session, including an above ground tank bill which requires, among other things, electronic registration, an inventory of contents, proximity to water intakes, and spill prevention plans and inspections must be completed. A landfill bill was passed requiring radiation detectors for landfills receiving drill cuttings from horizontal wells. WVDEP is coordinating with Ohio and Pennsylvania to address waste handlers shopping around for the best place for waste disposal. The water quality standards triennial review passed the legislature during the last session. Key items included nutrients criteria for warm water and cold water lakes, and updated criteria for beryllium.

PIACO

Ron Reichen reported that PIACO will be please to hear of all the attention given by TEC and the Commission on variances, mercury, and the mixing zone regulation.

New York

Commissioner Mike Wilson reported on behalf of Jeff Konsella. New York expects to complete two flood control projects this year in the Allegheny River Basin. The Chautauqua Lake TMDL for phosphorus has been approved and four permits have been modified to establish nutrient loading limts. The City of Olean has had permit violations regarding wet weather flows and is increasing their plant capacity from 7 million to 12 million gallons per day, and \$20 million in upgrades have been authorized by the city.

Next Meeting

The next meeting of the Technical Committee will be held October 7-8, 2014 at the Ogelbay Resort and Conference Center, Wheeling, West Virginia.

Adjournment

The 205th meeting of the ORSANCO Technical Committee was adjourned at 12:07 pm on June 11, 2014.

Approved:

Stuart & Bruny

Stuart Bruny, P.E.

Prepared by Jason Heath, P.E., BCEE with contributions from Sam Dinkins, Eben Hobbins, Jerry Schulte, Jeff Thomas, and Greg Youngstrom.

(Tape recording of proceedings available at Commission Headquarters)

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

Roster of Attendance

Technical Committee

Chairman	Commissioner Stuart Bruny
Illinois	Bob Mosher
Indiana	Shivi Selvaratnam
Kentucky	Randy Payne
New York	Not present
Ohio	Karl Gebhardt
Pennsylvania	Ron Schwartz
Virginia	Not present
West Virginia	Scott Mandirola
US Army Corps of Engineers	Erich Emery
US Coast Guard	Not present
US EPA	Tim Henry
US Geological Survey	Michael Griffin
Chemical Industry Committee	Not present
POTW Advisory Committee	Not present
Power Industry Advisory Committee	Cheri Budzinski
Public Interest Advisory Committee	Ron Riecken
Water Users Advisory Committee	Bruce Whitteberry
ORSANCO Chief Engineer	Peter Tennant
Staff Liaison	Jason Heath

Commissioners

Stuart Bruny, Craig Butler, Doug Conroe, Robert Dunn, Chuck Duritsa, Tom Easterly, George Elmaraghy, Tom Fitzgerald, David Flannery, Toby Frevert, Peter Goodman, Ron Lovan, Phillip Morgan, David Paylor, Ron Potesta, Bruce Scott, Paul Tomes, Ross Wales (legal counsel), Mike Wilson

Staff

Dave Bailey, Sam Dinkins, Joe Gilligan, Jason Heath, Eben Hobbins, Jerry Schulte, Jeff Thomas, and Greg Youngstrom

Guests

Jean Chruscicki	USEPA Region 5
Carl Gist	Evansville Water & Sewer Utility
Scott Hall	Environ (Nashville)
Tim Hall	Evansville Water & Sewer Utility
John Hirschfield	Axiall Corp.
Mike Labazke	Evansville Water & Sewer Utility
Alan Mounts	Evansville Water & Sewer Utility
Paul Novak	Ohio EPA