

OHIO RIVER VALLEY WATER SANITATION COMMISSION

MINUTES
228th Meeting of the Technical Committee
Embassy Suites RiverCenter/Virtual
Covington, KY
February 8-9, 2022

Chair Scott Mandirola, Presiding

Call to Order

The 228th meeting of the ORSANCO Technical Committee was called to order by Chairman Mandirola at 1:00 P.M. on Tuesday, February 8, 2022. Eight states, three federal agencies, and four advisory committees were represented (for Roster of Attendance see on page 15). Chairman Mandirola welcomed all to ORSANCO's virtually-held meeting of the Technical Committee.

Minutes of 227th Committee Meeting

ACTION: Motion passed to accept the minutes of the 227th Technical Committee meeting.

Chief Engineer's Report

Director Harrison provided a status report on the Ohio River Basin Alliance Ohio River Basin Restoration plan initiative. The goal of this effort is to ultimately secure federal funding for the basin similar to other watersheds in the U.S. such as the Great Lakes and Chesapeake Bay. The Ohio River Basin Plan was prepared by ORBA, ORSANCO, and the USACE, to set the stage for developing a restoration plan that would be used to establish restoration initiative funding. A number of work groups have been established to develop the restoration plan, including acid mine drainage, nonpoint source pollution (nutrient management, HAB's, nutrient trading), toxics, water infrastructure (drinking water and wastewater), habitats and species, invasive species, and environmental justice.

He then discussed unbudgeted high priority budget needs which will be presented to the Commission's Program and Finance Committee, including a data management system upgrade, updating PCBs, dioxin, and bacteria data for use in 305b assessments, PFAS added to fish tissue and bimonthly sampling programs, facilities equipment purchases of ventless hood and blower, water deionizer, and autoclave, survey to evaluate effects of submerged aquatic vegetation on biological pool surveys, in-season electrofishing revisit of one pool, micro-plastics survey, and portable GC/MS analytical unit, and mussel surveys to generate baseline conditions for future biological pool assessments, among others.

2022 Biennial Assessment of Ohio River Water Quality Conditions (305b Report)

The 305(b) workgroup met virtually on December 15th of last year to review the Ohio River use attainment assessments performed on Ohio River data from 2016 through 2020. The assessments applied methodologies that had been reviewed and updated by workgroup members over the past year as detailed during the October TEC meeting. The draft assessments indicate that the entire river was in full support of both the aquatic life, public water supply uses, and fish consumption based on methylmercury concentrations in fish tissue. The entire river is designated as impaired for fish consumption based on levels of PCBs and dioxin in historical water quality samples, and approximately two-thirds of the river is impaired for the contact recreation use based on bacteria monitoring results. Staff also reported that the workgroup supports an effort to determine the

feasibility of updating the historical datasets (e.g. PCB/Dioxins in fish tissue and longitudinal contact recreation surveys) and revisiting potential development of an assessment methodology for harmful algal blooms (HABs) when more guidance and data are available. Staff requested action on the 2022 assessments and will provide a draft 2022 Biennial Report prior to the June meeting.

National Weather Service Ohio River Forecast Center Climate Change Analysis for the Ohio River Basin

Jim Noel with the National Weather Service provided an update on the project. A review was given looking at the data used for the 2017 report which came from climate model (CMIP 3) data. Newer data comparisons of climate model data (CMIP 5) to CMIP 3 showed only a ~1% increase in precipitation. Very recent climate model data (CMIP 6) showed only another 1-2% increase. Overall, very minor changes occurred in newer data versus older meteorological/climatological input data of precipitation so the recommendation was there was no need to run an update hydrology study for the Ohio River Basin at this time. It is likely the next generation of climate model scenario runs in about 4-5 years may require an update as new technology comes along.

The report shows temperatures and rainfall will continue to increase in the Ohio Valley. The greatest wetting will occur from later summer through autumn but even spring floods are at risk. It is likely that most of the events through 2040 will stay within the historical range for high and low flow events before coming outside that range mid-century. Variability and uncertainty increases beyond mid-century. We will likely see temperature shifts on the order of I-64 shifting to I-70 weather or about a state shift north in this century. Rainfall will likely increase about ~5% per 30-year period. Observations of precipitation since 2000 confirm this is occurring in the region. The link to the detailed report from 2017 is located here:

https://www.lrh.usace.army.mil/Portals/38/docs/orba/USACE%20Ohio%20River%20Basin%20CC%20Report_MAY%202017.pdf

Status Update for the Source Water Contaminant Threat Inventory on the Ohio and Allegheny Rivers

Steve Allgeier, with the USEPA Water Security Division in Cincinnati, provided a status update for the source water contaminant threat inventory on the Ohio and Allegheny rivers. In 2017, U.S. EPA launched a project in partnership with ORSANCO and several public water systems that use the Ohio River as a source to develop a comprehensive inventory of source water contamination threats. The inventory includes a 320 mile segment of the Ohio River, and major tributaries, from upstream of Huntington, West Virginia to Louisville, Kentucky. In 2020, U.S. EPA extended this inventory to include the Lower Allegheny River, from Pittsburgh to New Kensington, PA. The project is currently in its final year and will conclude on June 30, 2022.

Source Water Protection Program Update

Staff provided an overview of the ongoing activities associated with the Commission's Source Water Protection and Emergency Response programs. This included an update on the Organics Detection System detailing the operational status of the system, software upgrades and instrument repair and maintenance. The Committee was also briefed on recent Emergency Response Program activities including the completion of an annual update to the Emergency Response Directory and a discussion regarding a number of recent notable spill events.

Biological Program Update

The Biological Water Quality Subcommittee met virtually on January 19th to review the prior year's biological surveys in Dashiels, Hannibal, Markland, and McAlpine pools. The unqualified fish index scores from the surveys revealed that all four pools were in "Good" condition. The subcommittee approved these fish results for inclusion in the pending pool assessments while they await the return of the 2021 macroinvertebrate data. Once those data are received the subcommittee will review and consider them for inclusion in the final assessments as well. Staff provided updates on successful fish tissue collections from the four pools performed in support of fish consumption advisories, 305(b) assessments, and a five-year grant with IDEM. The collections made on behalf of IDEM will be used by their staff to re-evaluate listed Ohio River segments and investigate PFAS levels

in fish tissue. Additionally, concerning PFAS, staff reported that the subcommittee recommended adding analyses of perfluorinated compounds to all future ORSANCO Ohio River fish tissue collections.

Aquatic Biologist Daniel Cleves detailed an approach to evaluate temporal trends in PCB fish tissue concentrations. Mr. Cleves explained how variations in fish length, tissue lipid content, analytical method, and laboratory can serve to obscure any potential temporal trend. The methods he detailed to address inherent biases and maximize the utility of ORSANCO's large fish tissue dataset were approved by the subcommittee, which also supported finalizing the analyses and preparing the results for later review. The subcommittee discussed sampling plans for the 2022 field season, recommending surveys in Belleville, John T. Myers, and Olmsted pools. Additionally they supported the survey of probabilistic sites in the unimpounded section below Olmsted Locks & Dam. These sites will assist staff in the calibration of biotic indices and provide state partners with necessary biological data from this unique section of the Ohio River. Lastly, the subcommittee supported ORSANCO staff's continued participation in USEPA's National Rivers and Streams Assessments (NRSA), recognizing that this may affect concurrent Ohio River activities.

Preliminary Results of Ohio River Ambient PFAS Survey

An update was provided to the Technical Committee on the Ohio River ambient PFAS monitoring project to characterize ambient levels of PFAS compounds in the Ohio River. A secondary objective of the study is to investigate the distribution of PFAS in the Ohio River water column. Project oversight has been ongoing through the PFAS Work Group made up of states, multiple federal agencies, water utilities, and ORANCO advisory committees and Commissioners. An overview of the survey design, sample collection methodologies, and analytical methods were discussed.

The first of two rounds of sampling at 22 sites has been completed and the second round is underway. Observations from Round 1 preliminary results were discussed as follows:

- 5 of 28 PFAS were above the laboratory level of quantification (~ 5 PPT).
 - PFOA (8 sites)
 - HFPO-DA (GenX) (9 sites)
 - PFBA (1 site)
 - PFBS (3 sites)
 - PFPeA (5 sites)
- 12 of 28 PFAS were above the detection level.
- PFOA & GenX had the largest number of samples above LOQ.
- GenX had the highest value (32ppt).
- There were detections of 1 or more PFAS at every site.
- 9 discrete samples collected at 3 sites – not much stands out in terms of PFAS distribution in the water column.
- Equipment blanks were collected with every sample
- 1 PFAS detected <1ppt at each of 2 sites.
- PFHxA & PFPeA
- 4 sets of replicates all had good agreement.
- Preliminary data is subject to an external review prior to being considered final.
- 2 samples arrived at the lab out of temperature range, and after consultation with USEPA, we did not resample at those two sites.

Member Updates and Interstate Water Quality Issues

Illinois

Scott Twait reported the following:

PFAS

PFAS sampling has been collected from 1628 taps at 1140 CWS, with no samples remaining to be collected as part of the PFAS CWS sampling project. There are no additional analytical results we are waiting on from Eurofin. Last week, the analytical data was organized and submitted to USGS. We are continuing to work on coordinating with systems on customer notification/quarterly monitoring compliance.

Preliminarily 126 systems have PFAS detections. Of the 126 CWS with detections 68 CWS have detections that do not exceed the Illinois Health Advisory values and 58 CWS have detections that exceeded the Illinois Health Advisory values.

Illinois has two water supplies from the Ohio River: Cairo and Rosiclare (ground water under direct influence of surface water).

- Cairo has a detection of PFOA and PFOS. The PFOS value was 4.0 ng/L, the PFOA value was 3.1 ng/L which was over the Health Advisory number of 2.0 ng/L.
- Rosiclare is groundwater under the influence of surface water. Rosiclare has a detection of PFOA and PFOS. The PFOS value was 2.8 ng/L, the PFOA value was 2.4 ng/L which was over the Health Advisory number of 2.0 ng/L.

For those facilities above the Health Advisory, we are asking them to monitor the finished water for PFAS and determine what can be done to decrease the concentration of PFAS.

We are currently looking to develop an MCL for PFAS. As part of this effort, USGS is putting together an occurrence and prevalence document based on the data collected.

Time-Limited WQS (TLWQS) (variances)

The Illinois Pollution Control Board has granted a chloride TLWQS (Variance) for the Chicago Area Waterway System (CAWS). This variance applies from December through April and applies to several classes in the watershed, such as: municipal discharges, industrial discharges, MS4 communities, CSO communities, Illinois Department of Transportation, Chicago Department of Transportation, and salt storage facilities. The goal of the TLWQS is for the affected chloride sources to apply BMPs to reduce the chloride loading to achieve the chloride water quality standard. The TLWQS is applicable for 15 years and must be reevaluated every 5 years. The Agency is in the process of sending the TLWQS to USEPA for approval. Additionally, the Agency is currently working on a General Permit to implement the provisions of the TLWQS.

Indiana

Brad Gavin reported on the following items:

Water Quality Standards

- **Water Quality Standards Coordinator:** Eileen Hack, IDEM's Water Quality Standards Coordinator and TEC member retired at the end of 2021. IDEM has hired Gabrielle (Gabby) Ghreichi (pronounced "gray-she") as our new Water Quality Standards Coordinator. Her e-mail address GGhreich@idem.IN.gov.
- **"Metals" Rulemaking:** Indiana's rulemaking to update its water quality criteria for certain metals has been promulgated and was approved by EPA on February 1, 2022.
- **Aquatic Life Methodologies Rulemaking:** Indiana has initiated a rulemaking to update the aquatic life criteria development methodologies which are applicable outside of the Great Lakes basin. This first notice of this rulemaking is open for public comment until February 12th. <http://iac.iga.in.gov/iac/20211229-IR-327210539FNA.xml.pdf>

Drinking Water PFAS Sampling

- To-date, 81 community water systems have submitted sample results for the Phase 1 portion of the PFAS sampling project. Phase 1 is for medium community systems – serve a population between 3,300 to <10,000. All results have been below the EPA health advisory levels and IDEM Action Levels.
- IDEM started Phase 2 in December 2021. Phase 2 involves sampling at community systems that serve a population <3,300. We expect to be finished with Phase 2 by December 2022.
- Phase 3 will start in January 2023. Phase 3 sampling will be at the large community systems.
- All PFAS sample results will be posted on our IDEM website at <https://www.in.gov/idem/resources/nonrule-policies/per-and-polyfluoroalkyl-substances-pfas/>. In regard to results for community water systems along the Ohio River, we have results posted for Dearborn County and Clark County. All finished water results are below Action Levels and Health Advisory Levels.

Watershed Assessment and Planning

Sampling PFAS in Fish Tissue: Fish tissue has been collected for PFAS since 2017, as part of IDEM’s fish tissue monitoring program. Historically, fish tissue samples selected for PFAS analysis were collected at sites near potential source areas (e.g., fire training areas, WWTP, airports) due to the costs of analyses. In 2021, organochlorine pesticide analyses were scaled back to free up resources. This allows for PFAS analyses to be conducted at all sites sampled in the fish tissue program.

- Currently 35 PFAS compounds are analyzed in fish tissue (previously only 13 compounds).
- IDEM and the Indiana Department of Health (IDOH) apply the Great Lakes Consortium Best Practice document for assessing whether fish consumption advisories are warranted for a waterbody. This Best Practice applies the USEPA RfD of 2 X 10⁻⁵ for calculating a lifetime health advisory.
- After results from the 2018 sampling season were reported, IDOH posted two fish consumption advisories based on PFOS fish tissue results: a “do not eat advisory” (fish tissue sample >200µg/kg in fillet and >700 µg/kg in whole fish from sampling conducted near a former DoD fire training area; and “one meal per month advisory (56 µg/kg)” based on a fish tissue result collected near paper manufacturing facilities).
- Based on 2020 sampling a third location near an airport/military facility will have a fish consumption advisory of one meal per month based on the PFAS concentrations. There were two other locations in the Great Lakes basins with elevated PFOS concentrations in the 1 meal/month category (Grand Calumet Lagoons and the Indiana Harbor Canal) but both of these locations have other contaminants already driving a Do Not Eat advisory.
- IDEM collected 24 fish tissue samples for PFAS analysis from tributaries of the Ohio River in 2020, including Tanners Creek, Laughery Creek, Silver Creek, Indian Creek, and Anderson River. A White Bass sample from Silver Creek and a Largemouth Bass from Indian Creek had PFOS concentrations >20ppb which fall in the 1 meal/week consumption category. All other samples had PFOS concentrations warranting unrestricted fish consumption guidelines.
- Fish tissue sampling took place in the West Fork and Lower White River Basin, as well as the Patoka River basin in 2021. In 2022, sampling will be in the East Fork White River and Great Miami River Basins.

Nonpoint Source Projects in Progress: IDEM is overseeing 8 nonpoint source projects that impact the Ohio River. Projects denoted with “WMP” are planning projects to produce watershed management plans. All other projects are to implement watershed management plans that have already been approved by IDEM and EPA:

FFY	Contractor	Project	ARN Start Date	ARN End Date	319 Dollars	HUC
2018	Clark County SWCD	Fourteen Mile Creek/Goose Creek-OH River Watershed	28-Dec-18	27-Dec-22	\$143,151.00	0514010104, 0514010106
2019	Historic Hoosier Hills	North Laughery Creek	15-Dec-19	14-Dec-23	\$408,663.00	0509020305
2019	Decatur County SWCD	Salt-Pipe Creek	01-Nov-19	31-Jan-23	\$357,500.00	0508000306
2019	Dearborn County SWCD	Whitewater River Watershed	01-Feb-20	30-Apr-23	\$357,500.00	0508000308
2019	Historic Hoosier Hills	Indian Kentuck Watershed	25-Mar-20	24-Mar-23	\$399,973.00	0514010102
2020	Vanderburgh SWCD	Lower Pigeon WMP	16-Feb-21	15-Feb-23	\$100,000.00	0514020203
2020	Gibson County SWCD	Highland Pigeon WMP	16-Nov-20	15-Nov-22	\$94,921.00	0514020201
2020	Washington County SWCD	South Fork Blue River	25-Jan-21	24-Mar-24	\$393,150.00	0514010406

NPDES Permits

Industrial Permits: IDEM is processing NPDES permit renewals for 5 Ohio River industrial facilities, which include 4 power plants and one refinery. These facilities are:

- CountryMark Refining and Logistics
- Lawrenceburg Power
- A.B. Brown Generating Station -SIGECO
- F.B. Culley Generating Station - SIGECO
- Clifty Creek Generating Station-Indiana Kentucky Electric Corporation

Most of these include both 316(a) thermal variances and cooling water intakes regulated under 316(b) that we will be addressing in the renewals. The Indiana field office of the U.S. Fish and Wildlife Service has expressed its concern that the cooling water intakes on the Ohio River could be impacting endangered Sheepnose mussels through the impingement and entrainment of the mussel larvae and the fish species which serve as hosts for the mussel larvae. IDEM is still evaluating this information.

Municipal Permits: In January, IDEM renewed the NPDES permits for the Evansville WWTPs, and we are working on a new permit for the City of Cannelton. They are putting in a new treatment system which will discharge to the Ohio River for their combined sewer overflows as part of their long-term control plan.

Kentucky

Katie McKone reported the following:

- Western Kentucky tornado relief support
 - Our Field Operations Branch assisted with emergency response and reporting on tornado impacts to W KY drinking water & wastewater facilities
- The Kentucky Energy and Environment cabinet has an [Environmental Justice](#) webpage, with resources and strategies
- Under our planning and protection page, the Cabinet now has a [PFAS website](#). Reports for the Division’s 2019 and 2020 sampling can be found there.

Water Quality Branch

- Submitted 2018/2020 Integrated Report to EPA, awaiting EPA-approval of 303(d) list
- All National Wetland Condition Assessment data for KY submitted to and accepted by EPA
- Topics for the 2021 Triennial Review include 1) Updating criteria for aquatic life for ammonia, 2) Updating human health criteria for 94 pollutants, and 3) Designating new Outstanding State Resource Waters (OSRW)
- DOW is working with Sanitation District 1 on two alternative restoration plans in Northern Kentucky in addition to the already EPA accepted alternative restoration plan in the Gunpowder Creek watershed.
- The Division resumed WQX submittals at the end of December. We expect to be doing a large number of submittals early this year and should be caught up by mid-year.

Surface Water Permits Branch

- The permitting branch continues their work on finalizing a nutrient optimization and permitting strategy to implement on major POTW permits.
- The permitting branch is also in discussion with a CSO community nearing the end of its Long-Term Control Plan and working to develop a permitting strategy for this community going forward.

Water Resources Branch

- Completed construction at Bullock Pen Lake Dam – a \$16 million rehabilitation project in northern KY near Crittenden
- Nearing completion on Scenic Lake Dam rehabilitation project in Henderson, KY
- Will be conducting engineering assessment of Clements Lake Dam on the campus of Morehead State University
- Continuing to support implementation of FEMA’s Risk Rating 2.0 flood insurance rating methodology; partial rollout in October 2021, full rollout in April 2022

Watershed Management Branch

- Finalized [Oil & Gas Generic Groundwater Protection Plan](#) and posted to DOW website
- DOW is finalizing internal review of the Nutrient Reduction Strategy Update, and awaiting EPA guidance for Hypoxia Task Force funding under the Bipartisan Infrastructure Law.
- DOW published its [2021 success story](#) highlighting the significant interagency collaboration and investment in the Clarks River watershed.
- Dale Booth is the Division’s new Source Water Protection Program coordinator, and her contact information is dale.booth@ky.gov.

Water Infrastructure Branch

- Continuing support of the Cleaner Water Program; a program that appropriated \$250 million in state American Recovery and Reinvestment Act funds for water infrastructure investments
- Preparing for implementation of additional SRF programs established under the Bipartisan Infrastructure Law (BIL).
- Capacity Development Strategy went to public notice, which is open until 2/11/22.
- Capacity Development Annual Report submitted to EPA on 12/29/2021.
- Drinking Water Infrastructure Needs Survey complete and sent to EPA as of 12/8/2021.
- Preparing for Clean Water Infrastructure Needs Survey

New York

Melanie Stein reported that New York’s annual water quality improvement program included a number of grants in the Allegheny River watershed, including riverbank stabilization projects and wastewater general improvement projects. She also reported that their draft 303(d) list of impaired waters requiring TMDLs was out for public comment which included waterbodies in the Allegheny watershed.

Note: Audio quality was poor. As a result, the entire report is not reflected here.

Ohio

Audrey Rush reported on the following items:

Staff

Chris Skalski - retirement

Maria Hood – replacement, start date February 28th.

Emily Imhoff – new rules coordinator

Integrated Report

The 2022 draft integrated report is out for public comment. Comment deadline is Feb 28, 2022. Ohio EPA webinar on February 15, 2022, at 1:30 p.m. Registration at:

<https://attendee.gotowebinar.com/register/4452068136911433997>

First time we are including Ohio River mainstem in our IR - 10 assessment units:

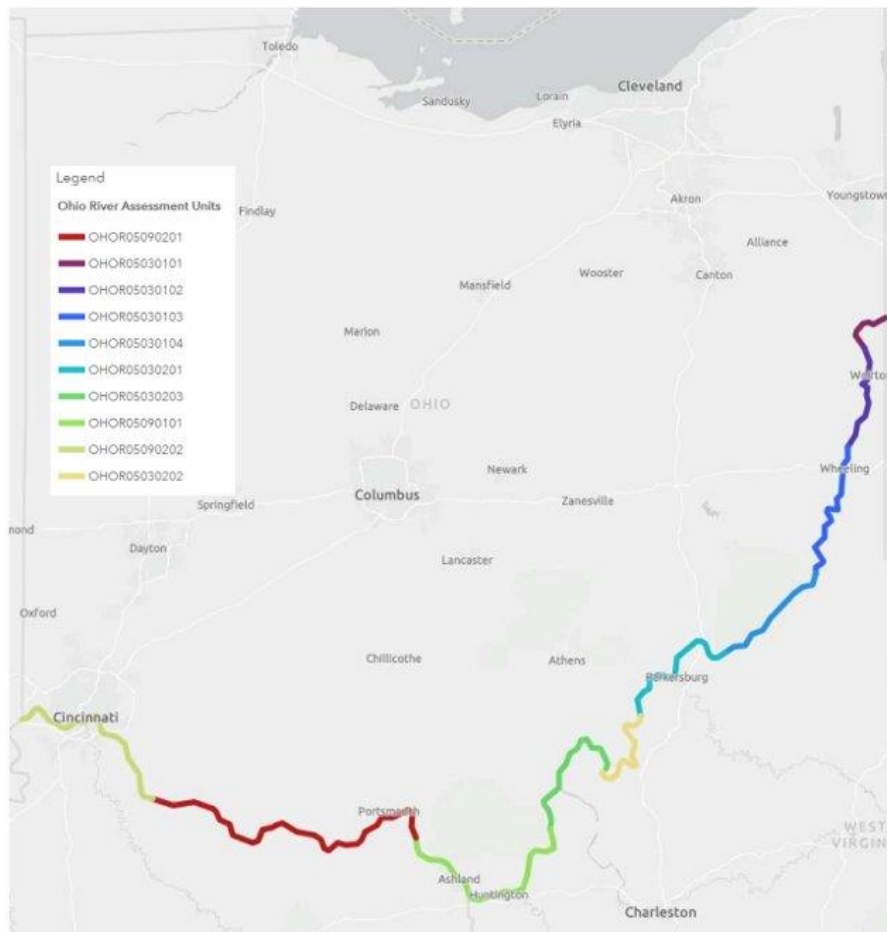


Figure D-4 – Ohio's Ohio River assessment units

Ohio River impairments:

- All are impaired for HH (fish consumption) due to PCBs
- One is impaired for drinking water – microcystin
- 6/10 impaired for bacteria

Defer to ORSANCO for aquatic life impairments until we get methodology incorporated into our WQS.

TMDL documents

Working on TMDL for multi-watershed bacteria

Loading Analysis Plan

- Symmes Creek, Indian Guyan Creek, and Direct Ohio River Tributaries. (Jackson, Lawrence, Gallia counties) Comment deadline is Feb 28, 2022
 - [Fact Sheet](#)
- Southern Ohio River Tributaries (Brown, Adams, Scioto counties). Comment deadline Feb 7, 2022
 - [Fact Sheet](#)

Survey

Study planning for Hocking River, Sunday and Monday creeks, the upper Great Miami River, Wabash River, Little Beaver and Yellow creeks and the Pymatuning River. Draft QAPPs should be out end of January/beginning of February for public comment.

Rules

1. **Beneficial Use Designations – Wave 2 [3745-1-09, -16, -17, -21]**
 - a. Scioto, SE Ohio Tribs,
 - b. SW Ohio Tribs,
 - c. Great Miami River

Proposed rules files with JCARR on 11/02/2021. JCARR hearing held 12/6/2021; public hearing held 12/17/2021. Preparing final rules.

2. **Beneficial Use Designations – 2020 [3745-1-08, -15, -18, -22]**

Updates to four basin rules (Hocking, Little Beaver, Little Miami, Chagrin)

IPR released 11/6/2021. Comment period ended 12/17/2021. Preparing packing for original file

3. **Definitions and Analytical Methods, References 3745-1-02, -03**

ESO began 5/24/21. Adding ORSANCO biosurvey methods to rule 03

PFAS

Ohio will use the update HH toxicity assessments for Gen X and perfluorobutane sulfonic acid (PFBS) to update our drinking water action levels

Pennsylvania

Kevin Halloran reported on the following:

1. 2022 Integrated report posted for comments. [Draft 2022 Pennsylvania Integrated Water Quality Report \(arcgis.com\)](#)
2. PADEP PFAS statewide results released. 412 total samples, detections at 112 locations, only 2 above HAL. two of the results were above the U.S. Environmental Protection Agency (EPA) Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the combined concentrations of PFOS and PFOA: State of the Art, Inc. in Centre County, and Saegertown Borough in Crawford County. Results were non-detect for the other 10 PFAS that were tested.

Draft MCLs proposed PFOS 18 ppt and PFOA 14 ppt approved by EQB. The proposed rule is anticipated to be published in the PA Bulletin this year for a 60-day public comment period. At least five public hearings will be held.

3. Shell Cracker:
 - 98% constructed
 - Wastewater treatment plant discharging
 - Cogen plant up and running
 - Ethane to site in May
 - Product in June
 - Thousands of tons of VOCs and HAPs and millions of tons of CO2

Permits on PADEP website

[https://www.dep.pa.gov/About/Regional/SouthwestRegion/Community%20Information/Pages/ Shell-Petrochemical-Complex-.aspx](https://www.dep.pa.gov/About/Regional/SouthwestRegion/Community%20Information/Pages/Shell-Petrochemical-Complex-.aspx)

4. Water Quality Criteria updates: published final triennial review in October 2020, approved by EPA. Now in regulations. Starting next review in early 2022.
 - EPA Aquatic Life Ambient Water Quality Criteria for Ammonia – equation with temperature and pH
 - EPA E. Coli criteria for Water Contact use to replace coliform based criteria
 - Toxic Substances- 73 compounds have updated criteria, 11 new human health criteria
5. The Proposed Rulemaking for Water Quality Standard for Manganese was published in the Pa Bulletin on July 25, 2020 (50 Pa.B. 3724). The Public Comment Period closed in September 2020. The Department is currently reviewing all the comments received during the public comment period and 3 public hearings to develop recommendation for final rulemaking that will be presented to the Department’s Advisory Committees before being considered by the Environmental Quality Board (EQB).

The proposed rulemaking that was approved by the EQB establishes 0.3 mg/L for human health, and discusses two possible approaches with respect to the point of compliance – either statewide as would be consistent with our other toxic substances criteria, or it will be only applied at the PWS withdrawal as per 25 Pa. Code § 96.3(d) to be consistent with Act 40 of 2017.

West Virginia

Scott Mandirola reported the following:

WV PFAS Study update

USGS has preliminary results for all 279 PWS, schools and daycare sites. The data has been reviewed and uploaded to the USGS NWIS database. The USGS has completed the initial draft of the USGS Data Release and is currently in the review process. The data is being analyzed and portions of the report have been drafted. Publication of the Data Release for dissemination of data to the public after completion of review. Publication of USGS report summarizing the findings of the project (Estimated: July 2022). Of the preliminary results received we have 5 sites with levels above the EPA health advisory for PFOA or PFOS.

Summary of PFAS Health Advisory Exceedances:

These are the sites identified to have PFOA+PFOS in excess of the EPA health advisory limit of 70 ng/l.

WV PWSID	System Name	USGS Site ID	PFOA (ng/l)	PFOS (ng/l)
WV3302605	Glenn Dale	395643080453201	3.3	98
WV3305404	Lubeck	391407081411601	1500	ND
WV3305411	Vienna	392053081323101	150	9.2
WV3305407	Parkersburg	391717081333802	98	6.5
WV3300212	Martinsburg 3	92534077590401	11	60

WQS Update

July of this year the DEP filed the WQS rule changes for HH criteria as required by the legislature in 2021, with the SOS and legislative rulemaking review. We have proposed to update the remaining 35 criteria, that we currently have in the rule, that EPA updated in 2015. The Environmental Protection Advisory Committee met monthly from June 2020 through May 2021 and made recommendations to the Secretary that include updating all 35 criteria, based on EPA recommendations and include a paragraph outlining a path to update any one with additional scientific data. The group did not agree on all approaches but recommended both to the Secretary. The WQS legislative rule, which passed out of the last committee hearing on Thursday, will be read on the house floor and will go to the Governor for signature. Brian Bridgewater has been named WQS program manager.

Other Legislative updates

Other rules of interest include a rule on CCR which incorporates the federal regulations so that the WVDEP can receive primacy over the program. A UIC rule update which updates our class I through V and adds a new section dealing with Class VI CO₂ sequestration. Once passed WV will submit a package to EPA to get primacy of Class VI. A bill establishing ownership of Rare Earth Elements (REE) that are extracted from acid mine drainage. It clarifies that the entity treating the water for acid mine drainage owns the sludge that may contain REE. A bill that would eliminate a number of O&G AST's within ZCC's from being regulated tanks. This bill is being opposed by the DEP the environmental community but supported by the O&G industry. Bills attempting to eliminate requirements of the AST act have been proposed every year since the passage in 2014.

Spill investigation

The ongoing spill of Benzene that currently has no identified source in the Pittsburg area is of concern and our Emergency Response group is staying in close contact with the DW sources and ORSANCO.

US Army Corps of Engineers

Erich Emery reported on two projects that are part of the Corps' Sustainable Rivers Program which is a partnership between the Corps' and Nature Conservancy. One is evaluating the effectiveness of managing dams operations and reservoir releases to maximize the ecological benefits of Ohio River flows. There is no new progress to report on that project at this time. The other project is to evaluate how mainstem dams manipulate upstream pool levels to meet ecological benefits. The kick-off meeting for this project has been postponed until May due to COVID. He reported the recent rollout of two new remote sensing tools, including an ARC GIS-based water quality toolbox regarding HABs indicators, and a HAB explorer to rapidly screen for HAB conditions.

United States Environmental Protection Agency

Dave Pfeifer reported that the public comment period has closed on the WOTUS rule, and USEPA will be responding to the many comments received. He also reported that there is working occurring on the 404 and 401 rules.

US Geological Survey

Jeff Frey reported the following:

Supergages and streamgages

We have several new streamgages and supergages to highlight. Last time I mentioned the congressional funding for Nutrient Supergages at two main Ohio sites and 4 major tribs. The Salt River site is now installed and transmitting. All sites can be found by clicking on the Site ID in blue below. We are waiting to hear about continued congressional funding.

[03216070](#) OHIO RIVER AT IRONTON, OH

[03612600](#) OHIO RIVER AT OLMSTED, IL

[03254520](#) LICKING RIVER AT HWY 536 NEAR ALEXANDRIA, KY

[03321500](#) GREEN RIVER AT LOCK 1 AT SPOTTSVILLE, KY

[03302060](#) SALT RIVER AT MOUTH AT WEST POINT, KY

[03290500](#) KENTUCKY RIVER AT LOCK 2 AT LOCKPORT, KY

Additionally, the Nutrient Super gage at the Wabash River at New Harmony was continued in collaboration with the Indiana Department of Environmental Management (IDEM) and USGS funds for three more years.

[03378500](#) WABASH RIVER AT NEW HARMONY, IN

There are also three new streamgages either complete (with Station ID in blue) or will be installed soon:

[03228689](#) Blacklick Creek near Pickerington OH (Discharge)

GREEN RIVER AT LIBERTY, KY (Discharge)

OHIO RIVER AT OWENSBORO, KY (Stage only)

HABs

Sampling at several Ohio sites and tribs finished in November 2021 and work on the report is ongoing with a due date of September 30, 2022.

New reports

This new HABs report includes data from the Ohio River at Cannelton site.

Cyanobacteria, cyanotoxin synthetase gene, and cyanotoxin occurrence among selected large river sites of the conterminous United States, 2017–18

[Cyanobacteria, cyanotoxin synthetase gene, and cyanotoxin occurrence among selected large river sites of the conterminous United States, 2017–18 | U.S. Geological Survey \(usgs.gov\)](#)

[Cyanobacteria, cyanotoxin synthetase gene, and cyanotoxin occurrence among selected large river sites of the conterminous United States, 2017–18 | U.S. Geological Survey - usgs.gov](#)

The U.S. Geological Survey measured cyanobacteria, cyanotoxin synthetase genes, and cyanotoxins at 11 river sites throughout the conterminous United States in a multiyear pilot study during 2017–19 through the National Water Quality Assessment Project to better understand the occurrence of cyanobacteria and cyanotoxins in large inland and coastal rivers.

www.usgs.gov

Power Industry Advisory Committee

Cheri Budzynski reported that the power industry is working on the implementation of the coal combustion rule and effluent limitations guidelines. Many power plants are anticipating closing units before 2030. There are three anticipated denials by EPA for extensions to rules affecting surface impoundments. Facilities are also investigating PFOS alternatives for fire suppression systems.

Watershed Organization Advisory Committee

Angie Rosser reported the following:

1. **Quarterly meeting.** The committee met on January 31 and discussed:
 - WOAC vice-chair election: Chris Tavenor with the Ohio Environmental Council was elected to vice-chair.
 - Items for WOAC's February report
 - ORSANCO updates from Richard Harrison
 - WOAC strategic planning
 - Member updates
2. **Maximizing impact of infrastructure investments.** We see transformational opportunities presented by the recently passed Infrastructure Investment and Jobs Act and the Biden Administration's Environmental Justice and Justice40 initiatives to improve the health of the river and benefit surrounding communities. We recommend that ORSANCO play an important role in prioritization and cross-state coordination around implementation in a way that has maximum impact on restoring and protecting the river.
3. **State roll-backs of clean water protections:** WOAC members remain concerned about basin states rolling back clean water protections. We urge ORSANCO to take an active role in educating policymakers on the importance of strong protections for streams and wetlands to water quality and to the overall restoration of the Ohio River basin ecosystem.
4. **50th Anniversary of the Clean Water Act.** WOAC members are planning events this year to mark the CWA's 50th anniversary. We see it as an opportunity for ORSANCO to engage the public in reflection on the influence the CWA has had on improving the river's water quality, as well recommendations for addressing its limitations in realizing a fully restored Ohio River.

Water Users Advisory Committee

Chris Bobay reported the following:

The Water Users Advisory Committee (WUAC) last met on January 25th via video conference. Committee member facility reports were all very positive. Several facilities reported on source water projects planned and underway for 2022. Higher than normal river TOC levels were observed in Cincinnati and Louisville.

Jamie Tsiominas gave an update on the Organics Detection System and reviewed protocols for detection and reporting. Of course, this report was very timely as we got to see the ODS monitoring network in full effect over the past week, with detections observed between West View and Wheeling, PA.

Sam Dinkins reported that ORSANCO staff have completed round 2 of the PFAS monitoring study and hope to have results available in the next few months. Committee members are eager to see the results of the study. It is not yet clear how states will administer funding from the Infrastructure Investment and Jobs Act to address lead and PFAS. EPA reports that SRF guidance will be coming out later this month.

We spent the remainder of our time reviewing a few river spills that occurred since our last meeting and highlighting some of the notification and response efforts. This after-action review process will continue to be a priority for this committee. ORSANCO staff are in the process of updating the Emergency Response Directory. Copies of the directory will be made available to committee members.

The Committee's next meeting is scheduled for May 17th. We will continue to meet virtually until a majority of members prefer meeting in person.

Adjournment

The 228th meeting of the ORSANCO Technical Committee was adjourned by Chairman Mandirola at 11:50 A.M. on Wednesday, February 9, 2022.

Approved:



Scott Mandirola

Roster of Attendance

Technical Committee

Chairman	Commissioner Scott Mandirola
Illinois	Scott Twait
Indiana	Brad Gavin (virtual)
Kentucky	Katie McKone
New York	Melanie Stein (virtual)
Ohio	Audrey Rush (virtual)
Pennsylvania	Kevin Halloran (virtual)
Virginia	Melanie Davenport
West Virginia	Scott Mandirola
US Army Corps of Engineers	Erich Emery (virtual)
US Coast Guard	Not present
US Environmental Protection Agency	David Pfeifer (virtual)
US Geological Survey	Jeffrey Frey
Chemical Industry Advisory Committee	Not present
Power Industry Advisory Committee	Cheri Budzynski
Public Interest Advisory Committee	Betsy Mallison Bialosky (virtual)
POTW Advisory Committee	Not present
Water Users Advisory Committee	Chris Bobay (virtual)/Peter Goodmann
Watershed Organizations Advisory Committee	Angie Rosser
ORSANCO Chief Engineer	Richard Harrison
Staff Liaison	Jason Heath

Commissioners/Proxies

Martha Clark Mettler (virtual), Douglas Conroe (virtual), George Elmaraghy, David Flannery, Toby Frevert, Michael Forbeck (virtual), John Hoopingarner, Carey Johnson (virtual), Tiffani Kavalec (virtual), John Kupke (virtual), John Lyons (virtual), Ron Potesta (virtual), Brian Rockensuess (virtual), Mike Wilson, Davitt Woodwell (virtual)

Staff

Ryan Argo, Dave Bailey, Bridget Borrowdale (virtual), Daniel Cleves (virtual), Stacey Cochran (virtual), Sam Dinkins, Tracey Edmonds (virtual), Joe Gilligan (virtual), Nick Guthier (virtual), Emilee Harmeling (virtual), Richard Harrison, Jason Heath, Melissa Mann (virtual), Adam Scott, Bridget Taylor (virtual), Rob Tewes (virtual), Jamie Tsiominas (virtual), Greg Youngstrom (virtual), Lila Ziolkowski (virtual)

Guests

Steve Allgeier	EPA
Robin Blakeman	(virtual)
Brian Chalfant	Pennsylvania Department of Environmental Protection (virtual)
Charles Duritsa	(virtual)
Gabrielle (Gabby) Ghreichi	IDEM (virtual)
John Hirschfield	Westlake Chemical (virtual)
Jim Noel	National Weather Service/Ohio River Forecast Center
Roy Powers	Current Hydro
Harry Stone	ORBA