OHIO RIVER VALLEY WATER SANITATION COMMISSION

MINUTES

226th Commission Meeting Crowne Plaza Indianapolis Downtown Union Station Indianapolis, Indiana Thursday, February 13, 2020

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MINUTES

226th Commission Meeting Crowne Plaza Indianapolis Downtown Union Station Indianapolis, Indiana Thursday, February 13, 2020

Chairman John Kupke, Presiding

Call to Order

Chairman Kupke called the 226th meeting of the Ohio River Valley Water Sanitation Commission to order at 9:00 A.M., Thursday, February 13, 2020.

Chairman Kupke invited Indiana Commissioner Harrison to lead the Pledge of Allegiance.

Quorum Call

Commissioner Wilson certified that a quorum was present (see Roster of Attendance, page 11).

Report of the Chairman

Commission Chairman Kupke provided the following report.

"As we begin the 226th meeting of the Ohio River Valley Water Sanitation Commission, it is my pleasure to welcome my fellow Commissioners, guests, staff, and all the diverse stakeholders who share our goal of protecting and enhancing the waters within the Ohio River Watershed. I know my fellow Indiana Commissioners, Bruno Pigott and Joseph Harrison, join me with the welcome to Indiana.

While we conduct our three core annual ORSANCO Commission, Technical, and Roundtable meetings each year at various locations throughout our eight compact states, we have not been to Indianapolis for the last 20 years. It is good to be back! We also hope you have enjoyed this historic downtown Union Station railroad setting in the heart of the city. The intertwined history of our railroads and major rivers in the Midwest, with the promotion of great population and industrial growth, certainly presented challenges for water quality in the Ohio River Watershed. The serious river pollution concerns of a century ago led to the creation of ORSANCO. It is now somewhat ironic that we have comfortably stayed and conducted our meetings in a former heavily industrialized setting (i.e. Union Station), having come far in resolving many past water quality concerns of the Ohio River, while now being confronted with new issues such as harmful algal blooms, PFAS, and other emerging contaminants.

We trust you have enjoyed your stay in this very walkable and dynamic Midwest City, which is located in the White River Watershed, where the two-forked White River flows through central and southern Indiana and is the major tributary to the Wabash River. The Wabash River, with the exception of the Tennessee and Cumberland rivers, is the largest tributary of the Ohio River. Yes, more than the southern portion of Indiana is intimately connected to the great Ohio River.

The business of our Commission meeting today will address important organizational matters including the budget, our annual audit, and a summary of the two preceding days of technical reports and various other committee reports. At our meeting in October of last year, the Commission approved the "now-in-process" update of our 2008 strategic plan. This was purposed to be completed within a one-year period. The core plan updating purpose was to more clearly identify specific program objectives and additional long-term funding sources, while continuing to fulfill the provisions of the 1948 ORSANCO Compact. We have proceeded with the updating process, as planned, at our meeting this week. Our central mission, the stewardship of the Ohio River and its interstate tributaries, consistent with the Compact language, remains the same. However, as we refresh our thoughts in this area, we are asking such questions as:

- How do we most effectively deploy our resources, making best use of our time, treasure, and talent?
- What does ORSANCO do best, and what could we do less of or omit?
- Do we need to revisit the essence of our organization, its mission and objectives, or do we, in the short-term, simply better prioritize and define program objectives?
- How do we better serve and coordinate amongst our member states as well as our federal partners and advisory committees?
- How do we more effectively engage the public and other stakeholders in Ohio River Watershed information, plans, and situations?
- How do we most beneficially balance ORSANCO's role with our member states between "doing" and "assisting"?

These and a number of other key questions will be worked on between now and our next meeting in June of this year. At that time, we look forward to presenting next year's fiscal year budget and program priorities in conjunction with a longer-term strategic plan update.

Our current Program and Finance Committee Chairman, Charles Duritsa, will chair our strategic plan update. Your interest and active support of this initiative will help to make our organization stronger and more responsive to all stakeholders of the Ohio River."

Recognition of Service

Chairman Kupke then recognized the following ORSANCO staff members for service milestones:

David Bailey – 20 years of service Lisa Cochran – 10 years of service Adam Scott – 5 years of service

Chairman Kupke asked Commissioner Lovan to present the following recognition of service resolutions:

Resolution 1-20 Recognition of Service Janean Hampton

WHEREAS: Janean Hampton has served as a Commissioner to the Ohio River Valley

Water Sanitation Commission from 2015 to 2019, representing the

Commonwealth of Kentucky, and

WHEREAS: Ms. Hampton has provided faithful and diligent service to the Commission,

and

WHEREAS: Ms. Hampton actively worked to help advance the Commission's goals, and

WHEREAS: Ms. Hampton was devoted to protecting the precious natural resources of

the Commonwealth of Kentucky while serving as Lieutenant Governor

NOW THEREFORE BE IT RESOLVED: The Commissioners of the Ohio River

Valley Water Sanitation Commission express their heartfelt gratitude for Janean Hampton's service, and wish her all the best in her future endeavors.

ACTION: Motion by Commissioner Pigott, second by Commissioner Harrison and

unanimously carried, that Resolution 1-20 be adopted as presented.

Resolution 2-20 Recognition of Service Charles Snavely

WHEREAS: Charles Snavely has served as a Commissioner to the Ohio River Valley

Water Sanitation Commission from 2015 to 2019, representing the

Commonwealth of Kentucky, and

WHEREAS: Mr. Snavely has provided faithful and diligent service to the Commission,

and

WHEREAS: Mr. Snavely actively worked to help advance the Commission's goals, and

WHEREAS: Mr. Snavely was devoted to protecting the precious natural resources of the

Commonwealth of Kentucky while serving as Secretary of the Energy and

Environment Cabinet

NOW THEREFORE BE IT RESOLVED: The Commissioners of the Ohio River

Valley Water Sanitation Commission express their heartfelt gratitude for Charles Snavely's service, and wish him all the best in his future endeavors.

ACTION: Motion by Carey Johnson, second by Commissioner Bruny and unanimously

carried, that Resolution 2-20 be adopted as presented.

Commissioner Flannery recognized the distinguished service of past Kentucky Commission Proxies Bruce Scott and Peter Goodmann.

Report of the Executive Director

Executive Director Richard Harrison began by commenting on what a privilege it is to work with such a great staff, and asked staff present to stand and be recognized. The Technical Committee meeting presentations highlighted the expertise of staff in a number of areas. He noted that in media interviews he always tries to bring attention to the science-based focus of ORSANCO.

Mr. Harrison then provided an update on permit reviews, indicating that seven NPDES permits were reviewed (one final, three draft, and three modified), with no significant issues being identified. An annual summary will be provided in October.

He then expressed his gratitude to the Commission for support while working through the ORBA Planning and Assistance (PAS) effort. This project is aspirational and he looks forward to working with advisory committees, water and wastewater utilities, and other stakeholders to develop outcomes that work for everyone. A status update will be provided in June. The Commission will be asked to consider endorsing the Plan at its June Commission meeting. He also recognized Dr. Harry Stone with ORBA for his hard work in helping to develop the Plan.

Action on Minutes

ACTION: Motion by Commissioner Wilson, second by Commissioner Duritsa and

unanimously carried, that the minutes of the 225^{th} meeting of the Commission, be

adopted as presented.

Report of the Audit Committee

Commissioner Hoopingarner began by noting that a 2019 Independent Auditor's Report was provided to Commissioners in the meeting packet.

Clark Schaefer Hackett, Certified Public Accountants, performed a general-purpose financial audit for fiscal year ending June 30, 2019. Kerry Roe, of Clark Schaefer Hackett, met with the Audit Committee on Wednesday, February 12th, to present and discuss the audit findings with the Committee and respond to any questions or concerns. Committee members, Commissioners Duritsa, Kupke, Wilson, Woodwell, and Harrison participated.

Due to the out of town Commission meeting location, to respect Kerry Roe's time, the Committee felt it was not necessary for Kerry to attend today's meeting.

In the auditor's opinion, the general-purpose financial statements present fairly, in all material respects, the financial position of ORSANCO as of June 30, 2019. There were no internal control related findings or issues.

The audit report is an "unmodified" report.

The Committee also requests authorization of the Commission to engage Clark Schaefer Hackett to perform the June 2020 financial audit. The June 30, 2019 audit was the third audit performed by Clark Schaefer Hackett. The Commission has authorized recent auditors to perform up to six audits due to the low risk nature and positive outcomes of the Commission's audits.

Commissioner Hoopingarner recognized staff members Bailey, Gilligan and Harrison for their continued good work resulting in an unmodified audit report.

ACTION:

Motion by Commissioner Hoopingarner, second by Commissioner Lovan and unanimously carried, to accept the independent auditor's report as presented and to authorize the engagement of Clark Schaefer Hackett to perform the June 30, 2020 financial audit.

Report of the Treasurer

Commissioner Wilson reported that a Treasurer's report, updated through December 31, 2019, was provided in the meeting agenda packet.

This report indicates a balance of \$463,392 in accounts receivable due the Commission. This balance represents \$213,490 due from signatory states, \$184,600 due from Federal sources, and \$65,302 due from other sources.

Additionally, the report indicates receipts of \$2,311,402, plus carryover of \$2,602,205, totaling \$4,913,607 through the end of December 2019. Of that amount, \$1,607,815 was expended on programs, leaving \$3,305,791 available for the continuation of ORSANCO's programs.

Commissioner Wilson thanked Joe Gilligan for his good work preparing the Treasurer's report.

Report of the Ad Hoc Committee on Mercury Studies

Commissioner Bruny provided the following status report:

"Mr. Chairman and members of the Commission – on behalf of the Ad-Hoc Committee on Mercury Studies, I'm pleased to offer a brief update on the status of our study. At our October meeting in Richmond, I reported to you that during our review of the last report draft, some of our state members identified some discrepancies in point source mercury loads contained in the US EPA ECHO database. As a result, we asked our state agencies to provide their internal discharge monitoring report (DMR) data to ensure we had the best estimate of mercury loads from point sources. Some states recalculated the loads, and some states provided their internal data for ORSANCO staff to recalculate mercury loads. We believe that we now have a much better estimate of mercury loads from point sources. I'd like to thank our member states for providing and/or recalculating this data, as I know in some cases, many hours were spent with this somewhat long, tenuous effort.

Since October, staff has also spent considerable time and effort redrafting the report, based on comments received from the Technical Committee and the Ad-Hoc Committee. Sections have been added on study limitations and relevance, or "what does this all mean?" The executive summary and conclusions sections have also been revised and updated. Work has also begun on messaging the report, if you will, in anticipation of a final report.

I'm pleased to announce a new draft of the report has been distributed to the Technical Committee and the Ad-Hoc Committee for one last review. Given the extensive amount of revised material, we feel it is important to give the Technical Committee, the Ad-Hoc Committee, and Commissioners another opportunity to review this draft. We have asked for any comments to be received by March 13th, 2020. Our goal is to make final edits and have a final report for consideration at our June meeting in Madison, Indiana.

I might caution that the report is still very much draft, subject to change, and should not be used or cited in publications or articles about ORSANCO, the Ohio River, or mercury at this time. Mr. Chairman, this concludes the report of the Ad-Hoc Committee on Mercury Studies. I would be glad to entertain any questions you might have. Thank you."

Commissioner Bruny then thanked Jason Heath, Ryan Argo and Bridget Taylor for their work on the Report.

Commissioner Lovan asked that the Commission join him in a round of applause recognizing Commissioner Bruny and staff for the good work in this challenging effort.

Report of the Technical Committee

Commissioner Pigott, Committee Chairman, reported that the Technical Committee met over the last couple of days and covered 12 agenda items. Seven states, two federal agencies, and three advisory committees were represented. I would especially like to thank outside speakers from the Kentucky Division of Water and the Electric Power Research Institute for their excellent presentations. A summary of the meeting follows:

Ohio River Basin Strategic Plan

Director Harrison provided the Technical Committee with an overview of development of an Ohio River Basin Strategic Plan, a joint effort with the Army Corps' of Engineers, the Ohio River Basin Alliance, and ORSANCO. He discussed the seven objectives under the Plan's Abundant Clean Water Goal which the Commission also heard about during yesterday's Commissioner's Roundtable session.

Source Water Protection Programs Update

A status update was provided on ORSANCO's Source Water Protection and Spill Response Programs. Staff has recently participated in a number of emergency response preparedness exercises and other planning activities. It was also reported that ORSANCO will host the US EPA Region 5 Annual Source Water Protection meeting in fall 2020. This will be a unique opportunity to showcase the great work being done in the Ohio River Basin to protect our drinking water resources.

An update was also provided on the Contaminant Source Inventory project which includes development of a GIS-based data management system to inventory potential contaminant threats and their associated risk to drinking water utilities. At the conclusion of the next phase of the project, contaminant threats will have been inventoried for over 300 miles of the Ohio River from Huntington, WV to Louisville, KY. Two pilot projects that came out of the Organics Detection System (ODS) Next Generation evaluation were also presented. This includes an evaluation of expanding the analyte list of volatile organic compounds and pilot testing semi-volatile organic analysis at two or three existing ODS sites.

HABs Update

ORSANCO staff provided an update on the Harmful Algal Bloom program. In the 2019 Federal HABHRCA reauthorization, there is a provision for funding of HABs and hypoxia events of national significance. US EPA is expected to have draft rules out for public comment in June. Staff provided a timeline of events regarding the 2019 HAB event, which impacted about 300 miles of the Ohio River for over a month. ORSANCO's "Ohio River HAB Monitoring, Assessment and Communications Plan" is being updated based on the 2019 HAB event, the recent publishing of US EPA's algal toxin recreational advisory levels, and comments on the plan submitted by the states and other partners. Finally, staff provided an update on the Ohio River HABs monitoring network and early warning system for HABs.

<u>Kentucky's State-Wide Evaluation of Community Drinking Water Systems for PFAS</u> Compounds

Rob Blair, with the Kentucky Division of Water, presented the approach and results of Kentucky's recent study to evaluate the state's community drinking water systems for PFAS (https://eec.ky.gov/Documents%20for%20URLs/PFAS%20Drinking%20Water%20Report%20Final.pdf. They sampled finished water from 81 communities for 8 PFAS compounds, which included 10 Ohio River drinking water systems. The study final report, including results and conclusions, can be found on Kentucky's website.

Ohio River PFAS Survey Update

Staff provided an update on the development of a PFAS survey of ambient conditions of the Ohio River which is expected to begin in 2020. The objective of the study is to characterize ambient conditions in the Ohio River at 20 sites during two rounds of sampling of differing seasonal events. The 20 sampling sites have been selected using a probabilistic approach, outside of regulatory mixing zones, and accepted by the Technical Committee.

ORSANCO is continuing to work with its federal partners, the US EPA and USGS, on analytical services and sample collection methods. The US EPA has agreed to provide the analytical services for the project, and the USGS has been conducting quality assurance evaluations of the preferred sample collection method for the Ohio River, with expected results in the next several months. Staff is focusing on quality assurance practices and large river surface water sample collection methods, to ensure defensible data, at a time when such procedures are in their early development nationally. The sample collection and quality assurance plans will be presented to ORSANCO's PFAS Workgroup and the Technical Committee for acceptance prior to commencing the survey.

Biological Programs Update

Staff presented results of the 2019 Pool surveys of Robert C. Byrd and Smithland pools. The fish and macroinvertebrate (macro) indicator results showed that Robert C. Byrd Pool was in *Fair* condition. The Smithland fish indicator results were presented which showed the pool to be in *Good* condition; however, macro results were not available at the time of the meeting. Staff also provided updates on investigations into the effects of aquatic macrophytes and Silver Carp on biological assemblages and indicator results. A standard decision tool for use in evaluating biological results is in development. Staff detailed the proposed 2020 field activities highlighted by a return to sampling efforts maintained prior to ORSANCO's National River and Streams program involvement. Staff will return to conducting surveys in three navigational pools (Dashields, Hannibal, and Olmsted), reinvestment in dedicated fish tissue collections, and add targeted sampling surveys. Lastly, a summary of ORSANCO's recent and potential future involvement in the US EPA's National Rivers and Streams Assessment was provided.

Report of the Ohio River 305b Coordinators Workgroup

Staff presented 2020 Ohio River use assessment methodologies for determining water quality impairments, along with draft results of those assessments, which covers the timeframe of 2014 through 2018. The 2020 assessment methodologies, which were approved by TEC in 2016, were identical to those used previously. The draft 2020 assessment results were largely the same as the 2018 results, with the only change being a five mile increase in the number of impaired miles for the contact recreational use based on current bacteria monitoring data. Draft results include the entire Ohio River in full support of both the aquatic life and public water supply uses. 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, which are also largely based on historical data. TEC endorsed the 2020 assessments for the Ohio River as recommended by the 305b Coordinators Workgroup. Staff will request an action on these assessment results during the June meeting, prior to which a draft report will be made available for review.

Ohio River Basin Mercury Loading Analysis

Staff distributed a draft of the Ohio River Basin Mercury Loading Analysis report to the Technical Committee for review and comment. Commissioners have also received a copy of the draft and are invited to provide review and comment (by March 13, 2020). The intention is to have a final draft ready for consideration at the June 2020 meetings.

Abatement of Combined Sewer Overflows for Ohio River Communities

Staff gave a presentation on implementation of the Nine Minimum Controls by combined sewer overflow (CSO) communities along the Ohio River. This update is provided to the Technical Committee annually at its February meeting. There are currently 48 Ohio River CSO communities. This is down from the previously reported 49 communities, as Vanceburg, Kentucky has converted to stormwater outfalls and no longer has CSOs. Implementation has improved slightly over the past decade, with Ohio River CSO communities achieving 90 percent or greater implementation for all of the Nine Minimum Controls except Pretreatment and Proper Operation & Maintenance. All 48 CSO communities have submitted their Long Term Control Plans (LTCPs). Forty of those plans have been approved.

Ohio River Basin Water Quality Trading Program

Jessica Fox, with the Electric Power Research Institute, provided an update on the Ohio River Basin Water Quality Trading Program.

The Electric Power Research Institute runs the world's largest water quality trading project in the Ohio River Basin, which was signed into action in 2012 by the states of Ohio, Kentucky, and Indiana. The project is comprised of a scientifically rigorous framework and now holds roughly 150,000 credits available for complying with regulatory permit limits or for meeting corporate or individual stewardship goals. Recent developments include collaboration with an international carbon credit broker, First Climate, to make water quality credits available for purchase with a credit card for as little as \$14 for an individual credit. Additionally, the team published a manuscript in PLoS One, which was picked up by National Geographic that quantified the nutrient reduction benefits of planting trees on marginal farmlands. The team is currently exploring new funding mechanisms to maintain the momentum of the project.

This concluded the Technical Committee's report.

Chairman Kupke recognized the good work of Technical Committee Chairman Pigott and his predecessor, Commissioner Wilson, as well as Jason Heath for compiling the Committee's report to the Commission.

Report of the Water Users Advisory Committee (WUAC)

Bruce Whitteberry, Committee Chairman, reported that the Committee met on January 28-29. Updates were provided on the operational status of the Organics Detection System (ODS), HABs, PFAS monitoring, and source water protection activities. He also noted that no significant spill events have occurred since the last meeting.

The Committee discussed the two remaining tasks of the ODS next generation evaluation workgroup. The first task was to include additional VOCs which could be added in the current analytic methodology. Approximately ten compounds were identified, and staff will be testing these for possible inclusion in the calibration standards. The second task was to determine the feasibility of including an estimate of cost and personnel time involved in including SVOCs in the monitoring program. Although unrealistic to monitor for all possible chemicals of concern in the River, the Committee identified SVOCs as being the ones of highest priority. Unfortunately, SVOCs are complex, and it is not feasible for all sites to currently monitor for these compounds. However, the Committee is hoping to identify one or two utilities that will pilot treat water SVOCs at their utilities to help determine the feasibility for a broader effort.

The Committee heard presentations by Jim Goodrich and John Hall of US EPA who provided an update on a research project on a fragmented DNA tracer on the Ohio River. An update was also provided on the status of the Ohio River contaminants source inventory.

Bruce thanked the Commission for an increasing focus on source water protection activities.

The Committee will also help ORSANCO's Communications Coordinator, Lisa Cochran, in an effort to identify a better estimate of the Basin population relying on the Ohio River as a source of drinking water.

Report of the Public Information Programs Advisory Committee

Betsy Mallison, Committee Chairman, reported that the Committee met on February 12, 2020, in Indianapolis.

Staff provided updates on the status of the current Mercury study report, as well as the proposed PFAS study. The Committee also discussed vacancies on the Committee and will actively work to get recommendations from Commissioners and others.

The Committee supports staff development of an internal communications plan to promote a positive image of the Ohio River Basin and better promote ORSANCO programs and activities.

The Committee also supports staff development of a more holistic approach to fundraising for all education and outreach programs and activities and coordinating all such activities under the Foundation for Ohio River Education (FORE).

Report of the Watershed Organizations Advisory Committee (WOAC)

Angie Rosser, Committee Co-Chair, began by noting that it is good to participate in the meetings and get a better picture of the broad scope of work ORSANCO is involved in. Ms. Rosser then provided updates on recent Sub-Committee activities.

The Ohio River Funding Sub-Committee is reviewing ORBA's Basin Strategic Plan as a foundation to seek Congressional funding. The Committee believes the Basin is overlooked compared to other entities and will support funding initiatives. Some Committee members participated in the ORBA planning process due to its importance.

The Emerging Contaminants & PFAS Sub-Committee is continuing discussion to determine and understand what other states and ORSANCO are doing around PFAS and plan to participate on the workgroup in March. More broadly speaking, many of their groups are monitoring the petrochemical proposed build-out on the River and concern over the added industrialization planned for the Basin. The Committee wants to work closely with ORSANCO to ensure all designated uses are protected. Ms. Rosser distributed two fact sheets, including concerns around petrochemicals, and requested they be included in the meeting record (Attachment I & II). This Committee would like to work with ORSANCO to help secure resources to perform baseline testing for microplastics.

The PCS Sub-Committee is focused on implementation of the Pollution Control Standards and recognizing the Commission's dedication to protecting designated uses. It is very important to have the monitoring and assessment science as a basis for making decisions. The Committee wants to work with ORSANCO to understand the science and applying it to solutions.

A question submitted to the Commission regarding PCS implementation remains open, specifically how the Pollution Control Standards will be reviewed and updated.

Finally, the Committee is very interested in ORSANCO's strategic planning process. This process is an opportunity to clarify possibly some public misconceptions about the Commission. There will be great benefit for this process to be an open dialog and as transparent as possible to better understand the priorities and role of the Commission in the future.

Additional Comments

Commissioner Pigott provided a brief update on the scheduled visit, following the Commission meeting, to view a new Indianapolis CSO infrastructure tunnel system, which will disperse storm flow as part of their CSO abatement work.

Upcoming Meetings

Chairman Kupke noted the following schedule for upcoming Commission meetings:

- June 9-11, 2020 Madison, Indiana
- October 6-8, 2020 Wheeling, West Virginia
- February 9-11, 2021 Covington, Kentucky
- June 8-10, 2021 Pittsburgh, Pennsylvania

Adjournment

The 226th meeting of the Commission was adjourned at 10:00 A.M.

Prepared by:	DaniOR. Bailey		
	/	_ Date:	February 17, 2020
	David Bailey		
	Director of Administration		
Approved by:	Michael P. Wilson	Date:	February 26, 2020
	// / / / /		
	Michael Wilson	_	
	Secretary/Treasurer		

ROSTER OF ATTENDANCE 226th Commission Meeting February 13, 2020

Commissioners

Illinois Scott Twait (PROXY for Director John Kim)

Indiana Bruno Pigott

John Kupke

Joseph Harrison, Jr.

Kentucky Ron Lovan

Carey Johnson (PROXY for Lt. Governor Jacqueline Coleman)

Paul Miller (PROXY for Secretary Rebecca Goodman)

New York Mike Wilson

Douglas Conroe

Ohio Stuart Bruny

John Hoopingarner

Pennsylvania Charles Duritsa

Davitt Woodwell

West Virginia David Flannery

Scott Mandirola (PROXY for Secretary Austin Caperton)

Virginia Melanie Davenport (PROXY for Director David Paylor)

Federal David Miracle

Legal Counsel Aaron Herzig

Executive Director Richard Harrison

<u>Staff</u> David Bailey, Jason Heath, Sam Dinkins, Joe Gilligan, Lisa

Cochran, Ryan Argo

Guests Angie Rosser – WOAC; Bruce Whitteberry – WUAC;

Ben Pedigo – PIACO; Henry Connor – PIACO; Betsy Mallison – PIACO; Don Bialosky – PA DEP;

John Hirshfield – Westlake Chemical

Appalachian Storage Hub/Petrochemical Complex

Summary of Main Concerns

The Appalachian Storage Hub complex (ASH), also known as the Appalachian Storage and Trading Hub, is a proposed mega-infrastructure project, which could encompass hundreds of miles of industrial facilities and pipelines along the Ohio River.

If built, this petrochemical complex would include five or more petrochemical "cracker" plants and regulating stations. There is already one large ethane cracker plant being built by Shell along a three mile stretch of the Ohio River, near Pittsburgh. There is another one well into a permitting process in Ohio, located across the Ohio River from Moundsville, WV. The industry has plans to construct one in the Parkersburg, WV area, as well as two methane processing plants in the Kanawha River Valley, near Charleston, WV.

Various natural gas liquids would be stored in unlined underground storage facilities near waterways in the Ohio River watershed, and transported via up to 15 possible pipelines. These would be liquefied natural gas product pipelines and the regulatory structure for such transport processes is more obscure, and less amenable to public input, than for "dry gas" or methane pipelines, despite the fact that LNG products are far more volatile than methane gas. So far as we can tell, there are no mandates for automatic shut off valves or other public safety devices.

The petrochemical complex would roughly follow the entire course of the Upper and Lower Ohio River Valleys. Currently, it is uncertain whether most of the infrastructure would be located on the Ohio side or the West Virginia side of the river. It would cost billions of dollars to construct. Tax payer dollars are already funding studies and brownfield redevelopment projects to support this buildout.

This petrochemical buildout would greatly expand unconventional oil and gas drilling (fracking) in WV, OH and PA – resulting in increased chances for spills and waste disposal issues, as well as climate change enhancing methane emissions. These processes will create more plastic feedstock, and plastic pollution.

Here are some specific concerns we have:

- As has occurred in the Gulf area: Leaks from underground storage caverns could lead to sinkholes, water contamination or explosions.
- This project would lead to increased petrochemical industrialization of Ohio River Valley. The
 experience of people in Cancer Alley of the Gulf Coast region informs us that the grave health risks
 outweigh the economic benefits.
- Risk of contamination of water intakes for the three to five million people who depend upon the Ohio River as their sole source of tap water.
- Many communities in the Ohio River Valley region are already economically challenged; many people
 in these communities can't afford to move or have poisoned water and increased health problems
 from air or water contamination.

For more information on the Appalachian Storage Hub and to read articles about it: https://ohvec.org/appalachian-storage-hub-petrochemical-complex/



Ohio Valley Environmental Coalition

Supporting Organized Voices and Empowered Communities Since 1987
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Microplastics Pollution

- 1. We believe that microplastics are an emerging pollutant source that should be studied in the Ohio River. Health effects in humans are uncertain but we know the pollutants are getting into water and the food chain (see articles below on plastics in bottled water, beer and salt).
- 2. We don't know of any baseline testing of Ohio River waters for these pollutants (This testing is underway in other bodies of water, such as the Great Lakes, and it can be simple and relatively inexpensive; see articles below). We request that baseline testing in the Ohio River be done as soon as possible. "Nurdles" (see below), and other petrochemical byproducts will become common if the Appalachian Storage Hub is developed.
- 3. Effects of plastics are already overwhelming many water and waste disposal systems. In the USA, the Tennessee River stands out as an example of horrendous plastic pollution. We do not want the Ohio River to become that gravely polluted, yet we believe it could happen soon, due to petrochemical build up in our region.

Perspective from Dr. Randi Pokladnik, a PhD-level chemist: https://www.heraldstaronline.com/opinion/local-columns/2020/01/quest-column-were-past-time-for-global-plastic-intervention/

"Nurdles" as a new pollutant, near Pittsburgh: https://qz.com/1689529/nurdles-are-the-biggest-pollution-disaster-youve-never-heard-of/

Sources of plastic pollution, and potential harmful chemicals found in this pollution: https://www.sciencedirect.com/science/article/pii/S0380133015000064

Investigative article on global plastics pollution:

https://orbmedia.org/stories/Invisibles_plastics?fbclid=IwAR1R4E3QOoOnQWwcRIsTGxYshshuovc9oscRTkqdei Mu88SBlyiqUB4ImN4

Investigative report on plastics in bottled water: https://orbmedia.org/stories/plus-plastic/text

Plastics pollution documented in numerous Great Lakes tributaries:

https://pubs.acs.org/doi/10.1021/acs.est.6b02917

https://www.democratandchronicle.com/story/news/2018/08/28/plastic-study-finds-tiny-synthetic-bits-great-lakes-tap-water-and-beer/971888002/

Plastics particles found in water, beer and salt: https://www.sph.umn.edu/news/plastic-particles-common-tap-water-beer-salt/

Plastics found in human fecal material: https://www.health.com/home/microplastics-human-poop