REVIEW OF ORSANCO POLLUTION CONTROL STANDARDS

April 1, 2017

I. Introduction.

The Ohio River Valley Water Sanitation Compact (the Compact) was signed in 1948 by the Governors of the States of Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia, following the consent of the United States Congress and enactment of the Compact into law by the legislatures of the eight states. The Compact created the Ohio River Valley Water Sanitation Commission (the Commission) as a body corporate with powers and duties set forth in it for the purpose of abating water pollution within the Compact District. Article I of the Compact mandates that all waters in the District be placed and maintained in a satisfactory, sanitary condition, available for certain beneficial uses. It is the mission of the Commission to ensure protection of these uses and to preserve the waters for other legitimate purposes.

The Compact grants the Commission authority to carry out its mission. Article VI states that "the guiding principle of this Compact shall be that pollution by sewage or industrial wastes originating within a signatory State shall not injuriously affect the various uses of the interstate waters." Minimum requirements for the treatment of sewage and industrial waste then are established in Article VI, as well as the authority of the Commission to require higher degrees of treatment where they are determined to be necessary after investigation, due notice, and hearing. Article VI concludes by authorizing the Commission to "adopt, prescribe, and promulgate rules, regulations and standards for administering and enforcing the provisions of this article."

Article IX of the Compact grants the Commission authority to issue orders, after investigation and hearing, for the purpose of achieving compliance with its standards. Any court of general jurisdiction or any United States District Court in the signatory states may be used by the Commission in order to enforce such orders.

It is the policy of the Commission to rely on the member states for the primary enforcement of its standards. Each of the member states is authorized to do so under the legislation that enabled its membership in the Compact. Each of the member states is authorized to administer the federal/state National Pollutant Discharge Elimination System (NPDES) as established in Section 402 of the Federal Clean Water Act. The NPDES permits are therefore the primary means by which the Commission's Standards are implemented and enforced.

The most recent version of ORSANCO's Pollution Control Standards for Discharges to the Ohio River was adopted by the Commission in 2015 and sets forth the uses to be protected in the Ohio River (Chapter 2) as established in the Compact, establish water quality criteria to assure that those uses will be achieved (Chapter 3), and set wastewater discharge requirements (Chapter 5) needed to attain the water quality criteria. The standards also recognize the rights of individual states to adopt and apply more stringent regulations.

The development of the Pollution Control Standards by ORSANCO has historically been in

furtherance of the commitment by the signatory states of the Ohio River Valley Water Sanitation Compact (Compact) to control future pollution and to abate then-existing pollution in the waters of the basin in order to "place and maintain the waters of said basin in a satisfactory sanitary condition, available for safe and satisfactory use as public and industrial water supplies after reasonable treatment, suitable for recreational usage, capable of maintaining fish and other aquatic life, free from unsightly or malodorous nuisances due to floating solids or sludge deposits, and adaptable to such other uses as may be legitimate."

The Clean Water Act enacted by Congress in 1972 incorporated many of these same principles – control of pollution, development of treatment standards, protection of recreational, drinking water, and other "legitimate uses," and a narrative standard of freedom from nuisance conditions, among others.

With the enactment of the 1972 amendments to the Clean Water Act, the EPA and ORSANCO recognized the need for an in-depth study of the roles which "ORSANCO could perform in complementing the Member States and the federal government's activities, in carrying out the responsibilities contained in the Federal Water Pollution Control Act Amendments of 1972." To that end, a study was commissioned by EPA in 1974 as a means of better defining "the areas of opportunity for effectively discharging these responsibilities in a cooperative spirit and an efficient mode." That study, titled A Study of Prospective Water Pollution Control Activities For The Ohio River Valley Water Sanitation Commission, was released in March 1975, and with respect to "stream standards," recommended that:

ORSANCO should work with the states in developing consistent stream standards for the main stem and tributaries having significant impacts on the main stem; and in periodic review of the standards. Its interest should be primarily in achieving interstate compatibility and equity.

Each state formulates stream standards for its own purposes and also for submission to EPA. However, the emphasis of each state is necessarily on its particular waters both in and out of the Ohio Basin. Since the Ohio is a boundary river, and because there are many other relationships as among the several state segments of the river system, the interstate agency should provide the overall view and the comparative analyses needed for coordination, consistency and equity. ORSANCO's stream models will be found useful.

II. Historical Summary of Standards Development

a. Ohio River Valley Water Sanitation Compact.

The Ohio River Valley Water Sanitation Commission (ORSANCO) was created in 1948 through the execution of the Ohio River Valley Water Sanitation Compact (Compact) by the State of Illinois, the State of Indiana, the Commonwealth of Kentucky, the State of New York, the State of Ohio, the Commonwealth of Pennsylvania, the Commonwealth of Virginia, and the State of West Virginia with approval of the Congress of the United States. In order to illustrate the historical role that ORSANCO took in developing water quality standards, it is helpful to summarize the key provisions of the Compact that relate to pollution control and the development of water quality

standards. These articles include Article I and Article VI:

ARTICLE I

Each of the signatory States pledges to each of the other signatory States faithful cooperation in the control of future pollution in and abatement of existing pollution from the rivers, streams and water in the Ohio River basin which flow through, into or border upon any of such signatory States, and in order to effect such object, agrees to enact any necessary legislation to enable each such State to place and maintain the waters of said basin in a satisfactory sanitary condition, available for safe and satisfactory use as public and industrial water supplies after reasonable treatment, suitable for recreational usage, capable of maintaining fish and other aquatic life, free from unsightly or malodorous nuisances due to floating solids or sludge deposits, and adaptable to such other uses as may be legitimate.

ARTICLE VI

It is recognized by the signatory States that no single standard for the treatment of sewage or industrial wastes is applicable in all parts of the District due to such variable factors as size, flow, location, character, self-purification, and-usage of waters within the District. The guiding principle of this Compact shall be that pollution by sewage or industrial wastes originating within a signatory State shall not injuriously affect the various uses of the interstate waters as hereinbefore defined.

All sewage from municipalities or other political subdivisions, public or private institutions, or corporations, discharged or permitted to flow into these portions of the Ohio River and its tributary waters which form boundaries between, or are contiguous to, two or more signatory States, or which flow from one signatory State into another signatory State, shall be so treated, within a time reasonable for the construction of the necessary works, as to provide for substantially complete removal of settleable solids, and the removal of not less than forty-five percent of the total suspended solids; provided that, in order to protect the public health or to preserve the waters for other legitimate purposes, including those specified in Article 1, in specific instances such higher degree of treatment shall be used as may be determined to be necessary by the Commission after investigation, due notice and hearing.

All industrial wastes discharged or permitted to flow into the aforesaid waters shall be modified or treated, within a time reasonable for the construction of the necessary works, in order to protect the public health or to preserve the waters for other legitimate purposes, including those specified in Article 1, to such degree as may be determined to be necessary by the Commission after investigation, due notice and hearing.

All sewage or industrial wastes discharged or permitted to flow into tributaries of the aforesaid waters situated wholly within one State shall be treated to that extent, if any, which may be

necessary to maintain such waters in a sanitary and satisfactory condition at least equal to the condition of the waters of the interstate stream immediately above the confluence. The Commission is hereby authorized to adopt, prescribe and promulgate rules, regulations and standards for administering and enforcing the provisions of this article.

b. Federal Pollution Control Historical Summary.

At the same time as ORSANCO was developing its regulatory program, water quality programs were being developed at the national and state level. The following are some of the more significant events in the development of federal water quality legislation.

1899: Congress adopted the Rivers and Harbors Appropriations Act primarily to protect navigation and prohibit discharge that would interfere with rivers as transportation links but did not address water pollution control.

1948: Congress adopted the Federal Water Pollution Control Act. This Act was the first major U.S. law to address water pollution. It authorized the Federal Works Administrator to assist states, municipalities and interstate agencies with the construction of treatment plants to prevent discharges of inadequately treated sewerage into other waters and tributaries. The act did not provide regulatory authority to the federal government and mainly encouraged water pollution control by the states.

1956: Congress amended the Federal Water Pollution Control Act to provide states and localities with grants totaling \$500 million for construction of wastewater treatment plants. (Funding for any one project could not exceed 30% of the cost.) The amendment also authorized the federal government or affected state governors to call an enforcement conference of federal, state and local authorities, and polluters when serious water problems occur across state lines.

1961: Congress amended the Federal Water Pollution Control Act to broaden the federal government's enforcement powers and to increase federal support of state and interstate pollution control to allow for funding of 55% of the costs to construct a wastewater treatment project.

1965: Congress adopted the Water Quality Act. The Act required states to develop water quality standards subject to federal review. It also ordered states to come up with plans to specify reductions in pollution discharges from individual sources. It expanded the focus of water pollution control from drinking water and human health to include ecological health of waterways for fishing and swimming. The implementation of this Act was a challenge because it required a very high linkage between polluters and water quality levels calling for more data than could be reasonably generated.

1970: President Nixon signed an Executive Order establishing the Environmental Protection Agency. The Order was ratified by Committee Hearings in the House and Senate. The Agency was established to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection.

1972: Congress again amended the Federal Water Pollution Control Act also known as the "Clean

Water Act (CWA)." The Act defines its purpose as "the restoration and maintenance of the chemical, physical and biological integrity of the nation's waters." It set national goals of eliminating discharges of pollutants into navigable waters by 1985 and of attaining fishable and swimmable waters by 1983. The Act required the development of technology based effluent limits in addition to a requirement that states establish water quality standards for the overall quality of a body of water needed to meet the designated beneficial use or uses of a waterbody (recreation, water

supply, industrial, or other). This helped alleviate the challenge of defining cause and effect in solely establishing water quality regulations that was such a challenge through the 1965 Water Quality Act. The Act focused on point sources and EPA was not given specific authority for regulating nonpoint pollution, which was still regarded by Congress as a state responsibility. States were required to develop an Environmental Protection Agency approved permit process under the National Pollutant Discharge Elimination System (NPDES). The Act also greatly increased funding for sewage treatment plants.

c. ORSANCO's Role in Water Quality Standards Development.

Shortly following the ratification of the ORSANCO Compact, efforts were initiated to develop the Commissions regulatory program. These efforts have continued over the years as highlighted in the following summary.

1949-1954: During the period between 1949 and 1954, ORSANCO approved Treatment Standards 1-7 for municipalities or other political subdivisions, or corporations discharging or permitted to flow into the Ohio River. These standards each covered different reaches of the Ohio River between Pittsburgh, Pennsylvania and Cairo, Illinois. These effluent standards were potentially different for each reach of the river covered by an individual Treatment Standard. At a minimum, each standard provided for the substantially complete removal of settleable solids; and the removal of not less than forty-five percent of the total suspended solids. However, additional provisions such as biochemical-oxygen-demand reduction that varied based upon river conditions as well as specific percent reduction in coliform organisms that varied during different periods of the year were also included. Treatment Standard No. 1 was approved on April 6, 1949 and covered the portion of the Ohio River commonly known as the "Cincinnati Pool," extending from ORM 461 to ORM 483.

1955: On April 6, 1955 ORSANCO adopted a resolution statement of policy and procedure for industrial-waste control. Between approximately 1953 and 1955, ORSANCO staff in consultation with its member states worked with 150 members of several industry-action committees including: the Steel Industry Committee; the Metal-Finishing Committee; the Distillery Committee; the Chemical Salts Committee; the Bituminous Coal Industry Advisory Committee; the Organic Chemical Committee; and the Oil Refinery Committee to discuss proposals under discussion and to participate in the evaluation of proposals. This action was not meant to establish effluent standards for industrial-waste control but was an effort to expedite industrial-waste control in the same orderly and effective fashion that municipal sewage-treatment requirements were established by the Commission. This statement of policy and procedure served as a guidance document to be applied by the member states to all waters within the Ohio River Valley interstate compact. The statement references an attachment document I.W. - No. 1 titled "Basic Industrial Waste Requirements" that was intended to address Article 1 of the Compact as it relates to being "free from unsightly or malodorous nuisances due to floating solids or sludge deposits." This document states that "Industrial wastes (exclusive of mine drainage until such time as practical means are available for control) shall be treated or otherwise modified prior to discharge so as to maintain the following conditions in the receiving waters:

1. Freedom from anything that will settle to form putrescent or otherwise objectionable sludge deposits which interfere with reasonable water uses.

- 2. Freedom from floating debris, scum and other floating materials in amounts sufficient to be unsightly or deleterious.
- 3. Freedom from materials producing color or odor in such degree as to create a nuisance."

Additionally, this effort served to help provide the Compact states with a plan of action for expediting the Commission's control program on interstate waters. The resolution also outlined the approach the Commission would take in developing future control measures for industrial-waste discharges by considering factors such as discharge size, flow, location, character, self-purification characteristics, established and proposed uses of the receiving stream, variability of industrial operations and economic considerations. It also laid out an approach for determining supplemental control requirements based upon continued investigations of water use and quality conditions based upon stream surveys with consultation and cooperation with appropriate state agencies and the industrial plants involved.

1966: On May 12, 1966 ORSANCO Quality Criteria were adopted by the Commission. In 1965, Congress enacted the Federal Water Pollution Control Act. This Act called on the states to adopt water quality standards for interstate waters. ORSANCO had anticipated this action and began working with the member states and industry advisory groups to develop in stream criteria for the Ohio River. ORSANCO worked with the states to hold a series of hearings on the standards for the Ohio, and Commission staff provided testimony in favor of adoption of the set of criteria that had been developed for the Ohio River. Those criteria were adopted by the Commission as "Recommended Water Quality Criteria" for the Main Stem of the Ohio River; they were updated as new information became available. The Commission would provide comments encouraging adoption of its recommended criteria for the Ohio River whenever a state reviewed its water quality standards.

In addition to recommended in stream numeric criteria, this document included an early version of what is currently referred to as the "four freedoms" as minimum conditions applicable to all waters at all places and at all times.

1970: On November 13, 1970 the Commission adopted Pollution Control Standards No. 1-70 and 2-70 to replace those adopted in 1949-1954. These Standards established effluent requirements for all discharges of sewage and industrial wastes to the Ohio River (Standard 2-70 contained thermal requirements for non-contact cooling water; Standard 1-70 contained those same requirements plus limits for numerous chemicals and applied to all other discharges). Among the requirements of Standard No. 1-70 was a list of chemicals adapted from the US Public Health Service requirements for sources of water to be used for drinking water. The goal of this update noted in staff's report to the Commission was to establish treatment standards, which spell out explicitly the kind and degree of control needed for waste discharges.

1984: In 1980, it was felt that a review of the Commission standards was in order, given the rapid pace of developments in the associated science. The review turned out to be lengthy as several philosophical issues arose. The continued need for ORSANCO standards was discussed, as well as the propriety of adopting effluent rather than in stream standards. On September 13, 1984, the Commission adopted revised standards replacing the 1970 Pollution Control Standards No. 1-70 and 2-70. These standards took a form very similar to the current standards – ie, the standards consisted of a definition of designated uses, water quality criteria to protect those uses, effluent limitations,

mixing zone requirements, and a variance procedure. The Commission also adopted a goal of reviewing its standards every three years.

1987-2015: The Commission undertook reviews and updates of the Pollution Control Standards in 1987, 1990, 1993, 1997, 2000, 2003, 2007, 2009, 2010, 2011, 2012, 2013 and 2015. Some highlights of these updates included: a 2003 revision requiring the elimination of mixing zones for BCC's by 2013; a 2010 revision extending the ability to grant variances to the mixing zone provision of the standards; a 2011 revision including the adoption of the TDS criterion for the protection of public water supplies; a 2012 revision that included the PPG mercury mixing zone variance approval as well as several changes to criteria including adding human health-based temperature criterion, revised aquatic life temperature criteria, revised bacteria criteria and reformatted standards; a 2013 revision that extended the deadline for mixing zone prohibition for BCC's from 2013 to 2015; and the 2015 revision that updated the mixing zone section and adopted EPA revised ammonia criteria.

2014-Present: On 12/4/2014, ORSANCO Chairman, Tom Easterly, established the Ad Hoc Committee on Water Quality Standards Implementation to review how ORSANCO water quality standards are implemented. During this process a larger question arose regarding potential alternatives to the ORSANCO Pollution Control Standards program. As a result of this question, on 6/30/2015, ORSANCO Chairman, Tom Easterly, modified the Ad Hoc Committee with a revised charge that included the evaluation of options relating to ORSANCO's future role with water quality standards implementation. The Committee discussed potential alternatives for the ORSANCO Pollution Control Standards program as is to eliminating the program. Five alternatives were developed by the Committee that include:

- 1. Eliminate ORSANCO's Pollution Control Standards program and have ORSANCO defer to the US EPA, Clean Water Act and state regulatory programs.
- 2. Modify ORSANCO's Pollution Control Standards (PCS) by removal of the Water Quality Criteria (Chapter 3), Mixing Zone Designation (Chapter 4) and portions of wastewater discharge requirements (Chapter 5) from the PCS and maintain the Chapters on Designated Uses.
- 3. Utilize a cost effective approach to finalize uniform WQS rules for the Ohio River by tasking ORSANCO to take the lead in order to eliminate duplication of efforts among six states and save resources. Also, as a starting point, utilize work done by USEPA to develop WQS to avoid conducting basic research.
- 4. Maintain ORSANCO's Pollution Control Standards (PCS) and work to modify the PCS to increase the focus on harmonization of standards implementation among Compact states and EPA.
- 5. Change ORSANCO's Pollution Control Standards to a recommendation for states to consider but not a mandate.

Alternative 2 was believed by the Commission to merit further consideration by a majority of the Commissioners to be forwarded to the Ad Hoc Committees and is further detailed later in this document.

III. Implementation of ORSANCO Pollution Control Standards.

The Commission's Pollution Control Standards ["PCS"] rules can be divided into the following categories:

- General Provisions
- Designated Uses
- Water Quality Criteria
- Mixing Zone Designation
- Wastewater Discharge Requirements

The Commission recognizes that its PCS rules are applicable only to the mainstream of the Ohio River and not to the entire basin. The Commission also recognizes that there are several provisions of the Compact that appear to be applicable more broadly than the mainstream of the Ohio River, including maintaining uses, not injuriously affecting uses of interstate waters; and maintaining a state's water in condition equal to water above confluence. The Commission also recognized that its own PCS rules state that "NPDES permits are therefore the primary means by which the Commission's Standards are implemented and enforced."

The Commission has reached the following conclusions about member state implementation of its PCS rules.

- a. Member states are implementing ORSANCO's water quality standards through implementation of the NPDES program mandated pursuant to Section 402 of the federal Clean Water Act. Some states accomplish this without actually adopting the ORSANCO water quality criteria while others seek to directly adopt PCS rules before incorporating them into NPDES permits.
- b. It appears that member states apply a set of designated use to the Ohio River that are comparable to those set by ORSANCO. In some cases states adopt the ORSANCO uses. In other cases states are applying use designations under their own authority or as part of the implementation of the federal Clean Water Act. Notwithstanding the differing approaches being undertaken to establish designated uses, there does not appear to be any appreciable difference in use being protected by each member state.
- c. It appears that member states generally consider the mixing zones ban of ORSANCO to be part of the implementation of WQS. Significantly, however, the implementation of mixing zone bans for BCCs occurs in three principal ways: (a) independent states bans (b) direct implementation of the ORSANCO ban in NPDES permits and (c) having no mixing zone ban of their own and not yet implementing the ORSANCO mixing zone ban in the issuance of NPDES permits.

- d. It appears that member states do not specifically adopt or apply the ORSANCO discharge requirements relying instead on the implementation of either state or CWA programs to set effluent limitations. There is indication in this review that the ORSANCO discharge limits are generally met or exceeded by alternative programs.
- e. It appears that member states have independent antidegradation programs under either state law or the CWA and that no additional action is needed to satisfy the ORSANCO requirements.
- f. While member states have not specifically adopted an ORSANCO requirement prohibiting interference with another states water uses, such a mandate is in fact being implemented under other authority including state authority and the federal Clean Water Act.

While there are some state specific differences in water quality criteria, the Commission concludes that member states are fairly implementing it PCS rules, including water quality standards, through programs called for under the federal Clean Water Act.

IV. "Alternative 2" Expanded: "Clean Water Act Alternative to ORSANCO PCS Rules"

In recognition of the successes of the federal Clean Water Act and the related state programs of member states, ORSANCO proposes to amend its Pollution Control Standards by eliminating water quality standards and criteria, as well as mixing zone and wastewater discharge requirements, from the rules and by making changes to other sections of the PCS. In furtherance of its conclusion that member states are implementing programs appropriate for implementation of the federal Clean Water Act, the Commission proposes not to continue the triennial review process related to its PCS rule.

The PCS rule is currently divided into four substantive categories: (1) designated uses, including a single "free from" mandate, (2) water quality criteria, (3) mixing zone designation, and (4) wastewater discharge requirements.

With respect to designated uses and "free from" mandates, Article I of the Compact provides:

"each state agrees to enact any necessary legislation to enable each state to place and maintain the waters of said basin in a satisfactory sanitary condition, available for safe and satisfactory use as public and industrial water supplies after reasonable treatment, suitable for recreational usage, capable of maintaining fish and other aquatic life, free from unsightly or malodorous nuisances due to floating solids or sludge deposits, and adaptable to such other uses as may be legitimate".

Moreover, Article VI of the Compact provides "the guiding principle of this Compact shall be that pollution by sewage or industrial wastes originating within a signatory state shall not injuriously affect the various uses of the interstate waters ..."

With respect to Wastewater Discharge Requirements, Article VI of the Compact specifically addresses the treatment of discharges of settleable solids and total suspended solids and provides that

such treatment preserve the uses specified in Article I "to such degree as may be determined to be necessary by the Commission...."

With respect to water quality standards and mixing zones, unlike designated uses and wastewater discharge requirements, water quality standards and mixing zone are not specifically mentioned in the Compact.

Because all states are mandated by the federal Clean Water Act to adopt and submit for USEPA approval a program that addresses designated uses, free from mandates, wastewater discharge requirements, water quality standards, mixing zones, and more, the Commission has concluded that the requirements of the Compact are being satisfied by member state programs implementing the federal Clean Water Act. The Commission has also concluded that all of its member states are implementing programs approved under the federal Clean Water Act for the safe and satisfactory uses of the Ohio River as public and industrial water supplies after reasonable treatment, suitable for recreational usage, capable of maintaining fish and other aquatic life, and that therefore the requirements of the Compact are being satisfied by member states through these programs.

Given the fact that all member states are implementing approved programs under the federal Clean Water Act, there appears to be little or no purpose for the Commission to continue the triennial review process of updating the PCS rules. Accordingly, the Commission is considering the removal of the water quality criteria (Chapter 3), and mixing zone designation (Chapter 4) and potentially revisions to other portions of the PCS including the "free from" requirements (Chapter 1) and wastewater discharge requirements (Chapter 5) as part of its decision to defer to the Clean Water Act programs being implemented by member states and USEPA.

By proceeding under this approach the Commission is confident that public will have the full and complete protection of the federal Clean Water Act and the oversight of USEPA and the states without the redundancy of the current PCS program.

This approach will allow ORSANCO to redirect resources not needed for the PCS program to be redirected to other Commission activities such as assessments of the water quality and biological integrity of the river, public out-reach, spill detection and response and many, many other programs with respect to which ORSANCO is uniquely qualified and with respect to which states have few, if any alternatives.

V. Minority Report of Commissioners regarding ORSANCO Pollution Control Standards

On December 5, 2014, then-ORSANCO Chairman, Tom Easterly, established an ad hoc committee of Water Quality Standards Implementation, with a charge to address the differences among the member states in how ORSANCO water quality standards are implemented. In addressing this matter, the committee was requested to work with the staff to accomplish the following tasks:

(1) To identify the nature and extent of these differences;

- (2) To determine whether such differences are contrary to or unreasonably interfere with the effective implementation of the ORSANCO Compact; and
- (3) To provide the Commission with any recommendations that the committee believes to be appropriate to address any such differences.

The committee was requested to make a progress report to the Commission at its meeting in February 2015 and make its final report to the Commission at its meeting in June 2015, along with any recommendations that may be appropriate in the following categories:

- a. Alternative approaches that ORSANCO may wish to consider in addressing the requirements of the Compact with respect to water quality.
- b. Alternative approaches that member states may wish to consider in implementing the Compact requirements with respect to water quality including the consideration of the time period within which such requirements must be implemented.
- c. Action that should be taken by the Commission in the event that any member state fails to properly implement Compact requirements.

During the course of the Committee's work, a more general question was discussed concerning the relationship of the Commission's Pollution Control Standards to the water quality standards and water pollution permitting programs adopted by the signatory states in conjunction with EPA pursuant to the Clean Water Act. The Committee recommended that the full Commission assess whether ORSANCO's maintenance and periodic revision of mandatory pollution control standards for the basin remains an effective strategy for implementing the principles and goals of the Compact, and did not recommend a particular path or prejudging the answer to that question going forward.

Among the options that the Committee suggested the Commission might wish to consider were:

- Maintaining the current approach to development and revision of mandatory standards;
- Modifying the current program by charging the PCS Committee to review state implementation of the ORSANCO Pollution Control Standards as part of each PCS review, and providing the Commission with a recommended course of action with respect to any areas of concern;
- Modifying the current program by inclusion of a mechanism to allow a state to request that ORSANCO acknowledge and approve state implementation provisions that differ from a comparable ORSANCO provision;
- Limiting ORSANCO to participating in development of state and EPA standards affecting the basin and working with the states to assure consistency and equity in water pollution policies affecting the basin;
- Limiting ORSANCO to publication of recommended model water quality standards for the mainstem in lieu of the current mandatory standards;
- Completely disengaging ORSANCO from standards development; or

- Some combination of the above.

The ultimate question to be answered is which of these, or other alternatives, would best implement the Compact principles while allowing the most efficient use of the resources of the Commission, EPA and the signatory states.

During the most recent Commission meeting, a decision was reached to solicit the input from the Committees regarding five alternative strategies, reflecting a range of options for ORSANCO's involvement in water quality and pollution control standards going forward. A majority of the Commissioners concluded that during this process of soliciting committee input, it should be conveyed that the Commission tentatively favors the option of complete disengagement from setting and implementing pollution control standards.

That decision was not unanimous, and this minority report reflects the grave concern of several Commissioners that the elimination of the ORSANCO Pollution Control Standards is unwise and will compromise, rather than further, the goals of the Compact and the health of the Ohio River.

The underlying premise of the alternative favoring elimination of the Pollution Control Standards, is that the standards are redundant to individual state programs under the Clean Water Act, and that individual state implementation of the Clean Water Act within that portion of the Ohio River Basin affected by the state, will result in achievement of the Compact goals and objectives regarding the restoration and protection of the Ohio River.

We believe the premise to be flawed for several reasons:

First, ORSANCO's PCS are not redundant to the provisions of the Clean Water Act. A sideby-side comparison of the Minimum Water Quality Criteria with the 122 Minimum Criteria established in the ORSANCO Pollution Control Standards reflects that there are at least 188 parameters among the 6 signatory states and EPA, for which ORSANCO has a criteria but the state or EPA does not. Adoption of EPA-developed categorical effluent limitations or water quality-based effluent limits by a state, may not be adequate to protect the aquatic life and uses of the Ohio River.

Second, the presence of an individual parameter in an approved state program under the Clean Water Act, or the presence of a mixing zone or antidegradation policy in an approved state program, does not assure that *implementation* of that standard or policy is being undertaken in a manner that is coherent among the states in the basin, or is sufficiently protective of the Ohio River downstream of the state in question. A more metered approach to identifying and addressing inconsistencies among state implementation of Clean Water Act and ORSANCO PCS provisions in order to assure protection of the quality and uses of the Ohio River, is among the other alternatives presented for your consideration.

Third, ORSANCO, as a federally-sanctioned compact among several signatory states, possesses a degree of insulation from the vagaries of the political process, and is able to research, develop, propose, and adopt standards tailored to the specific needs of the river in an atmosphere that stresses sound science and data-driven policy. The recent action by Congress to eliminate the Stream Protection Rule adopted by the federal Office of Surface Mining after a 7-year vetting process, and

the EPA proposals to suspend and reconsider rules defining "Waters of the United States" and effluent guidelines for discharges from electric generation units, reflect that the standards and scope of the Clean Water Act and regulations adopted pursuant to that Act are neither static, nor necessarily as broad or protective, as might be needed to address the specific needs of the Ohio River Basin. The presence of ORSANCO's PCS act as a backstop to assure that irrespective of changes in federal policy, adequate and sufficient standards for pollution control will remain intact and through the triennial review process, current.

As your Committee considers the alternatives that have been presented for consideration and input, we believe it important to convey this disagreement and grave concern felt by a number of Commissioners, with the preferred alternative of a majority of the current Commissioners to eliminate the Pollution Control Standards.

VI. Process to be followed to evaluate proposed revisions.

As an initial step in the assessment of these proposals, the Commission will invite input from its Ad Hoc Committees and Technical Committee to be submitted by no later than September 1, 2017.

Although a majority of the current Commissioners believe that "Alternative #2" merits additional review, the Commission stresses that this is still considered to be a preliminary internal discussion. The Commission will then consider Committee input in connections with its Fall Meeting. Should the Commission decide at the Fall Meeting to move forward with any of these proposals, the Pollution Controls Standards Committee will be requested to advance these proposals through the next triennial review process that is expected to begin in the spring of 2018.