Summary of Comments Received from Initial Public Comment Period for Revisions to Pollution Control Standards for Discharges to the Ohio River 2015 Revision

Index of Entities Submitting Comments

American Rivers	AR
East Kentucky Power Cooperative	EKPC
KY Resources Council	KRC
NY State Department of Environmental Conservation	NYSDEC
OH Environmental Council	OEC
Ohio Utility Group/ORSANCO Power Industry Advisory Committee	OUG/PIAC
PA Department of Environmental Protection	PADEP
Private Citizen	PC
Private Citizen/KY Waterways Alliance Member	PC/KWA
Sanitation District No. 1 of Northern KY	SD1
Sierra Club Hoosier Chapter	SCHC
US Environmental Protection Agency	USEPA
US Fish and Wildlife Service	USFWS
Utility Information Exchange of KY	UIEK
Valley Watch	VW
WV Chamber of Commerce	WVCC
WV Manufacturers Association	WVMA
WV Municipal Water Quality Association	WVMWQA
WV Rivers Coalition	WVRC

INITIAL ISSUES IDENTIFIED FOR REVIEW

Duration and Frequency of All Water Quality Criteria

Supports development of duration and frequency for all criteria but reserves the right to make case-by-case judgments on specific proposals. (KWA, KRC, OEC, ORF, PC/KWA (12 comments), SCHC, VW, WVRC, AR, WVMA).

Supports development of duration and frequency values for criteria and provided examples based on PADEP's criteria. (PADEP).

ORSANCO should exercise caution in developing frequency and duration based on limited or outdated data, and should consider whether the underlying data used in the federal criteria are appropriate to the Ohio River. (SD1).

Specification of 7Q10 and 1Q10 for application of chronic and acute criteria is appropriate. Use of harmonic mean flow for human health carcinogens is appropriate. Use of 7Q10 for human health non-carcinogens is inappropriate. Criteria based on fish consumption should use the 30Q5 flow, or the harmonic mean for those parameters with lifetime exposure concerns. See Technical Support Document for Water Quality-Based Toxics Control (4.6.1). (WVMWQA).

Mercury/Methyl Mercury Issues

The current "not to be exceeded" total mercury water quality criterion should not be reconsidered. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC, SD1).

ORSANCO has ignored evidence of mercury impairment and should not use a weight of evidence approach. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC, AR).

ORSANCO should review its total and methyl mercury criteria. Language such as "never to be exceeded" should be avoided. (PADEP).

The total mercury water quality criterion may not be protective against bioaccumulation above 0.3 mg/kg in mussels. While these mussels may not typical be consumed by humans, they are consumed by fish that are consumed by humans, and such fish may have a greater likelihood of having higher concentrations above the 0.3 mg/kg methyl mercury criterion. (USFWS).

Recommends Preference #1 – Framework where only a fish tissue criterion applies, and reasonable potential (RP) is assessed based on whether this criterion is attained. If RP exists, the permittee can develop a site-specific total mercury criterion. Preference #2 – Framework where fish tissue and water quality criteria are applicable, and allow for an alternative water quality criterion based on development of a MeHg translator. (OUG/PIAC).

Kentucky's total mercury criterion is less stringent than ORSANCO's which may be overly conservative and burdensome to electric utilities. ORSANCO should review its mercury criteria including an evaluation of the total bioavailable mercury and development of translators to determine the amount of bioavailable mercury, determination of whether the translator used to develop the 0.012 ug/L total mercury criterion is supported by science, and whether the water quality criterion should be eliminated in favor of the fish tissue criterion. (UIEK, EKPC).

The total mercury water quality criterion is not based on science, whereas the fish tissue criterion is. An alternative water quality criterion should be based on a translator from the fish tissue criterion. (WVCC, WVMA).

Delete the water quality criterion in favor of the fish tissue criterion. POTWs should not be put at risk due to atmospheric sources. Any permit calculations should be based on harmonic mean flow. (WVMWQA).

Total Dissolved Solids Criterion

Based on ORSANCO's TDS Study, the Commission should either maintain the existing TDS criterion, or KWA's preference would be to implement additional criteria for the other main constituents of TDS that don't currently have criteria including bromide, calcium, bicarbonate and sodium. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC).

Comment supports the current TDS criterion of 500 mg/L. Would not characterize the use that the TDS criterion is designed to protect as a "nuisance condition". (PADEP).

The 500 mg/L TDS criterion, as well as the 250 mg/L chloride criterion, may not be protective of sensitive mussel species in the Ohio River. These criteria should be reviewed. (USFWS).

A TDS criterion is not needed based on results of ORSANCO's recent study and the lack of related problems at drinking water utilities. (OUG/PIAC, EKPC, UIEK, WVCC, WVMA, WVMWQA).

E. coli Criterion

ORSANCO's criteria should revised to be in line with USEPA's "Beaches Act" recommendation for criteria at an illness rate of 32/1000 (30 day geometric mean of 100/100mL; STV of 320/100 mL). (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC).

ORSANCO's 2012 E. coli criteria should be re-adopted. (AR).

ORSANCO should review its E. coli criterion but undertake a thorough review in evaluating USEPA's new recommendations. (PADEP).

Recommends retaining current criteria or conducting a study to determine whether USEPA's new criteria which were developed for beaches on lakes or oceans is applicable to the Ohio River. USEPA's final recommendation was based on policy, not science. It is highly unlikely that USEPA's new recommended criteria are attainable under feasible management scenarios on the Ohio River due to the impacts from multiple wet weather sources. (SD1, WVMWQA).

Some opportunity to partition between wildlife and human impacts should be allowed since discharges only have the ability to control their effluent quality. (WVMA).

Human Health Temperature Criterion

Recommends that ORSANCO's human health temperature criterion of 110 deg F apply at the point of discharge to protect all points where human access is possible. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC).

Comment supports the current criterion of 110 deg F. Suggests the need for flexibility such as in cases of small submerged discharges in large rivers, the qualification of "where public access is possible" may provide for such flexibility. (PADEP).

A human health temperature criterion is not justified in the absence of a comprehensive human health risk assessment from thermal mixing zones. Several once-through cooling units are planned for retirement in 2015, and ORSANCO should consider this reduction in exposure in its justification of a criterion. If justification can be established, the criterion should be set at 116.5 deg F. (OUG/PIAC).

Reevaluate the temperature criterion which could be misconstrued to apply anywhere in the Ohio River. At a minimum, ORSANCO should determine whether the regulation applies after initial mixing based on the likelihood of human exposure, gradient temperatures within the plume, and duration of exposure. (UIEK, EKPC).

Recommends revising criterion to 116.5 deg F for the protection against second degree burns and applied in limited areas restricted to the public. (WVMA).

Aquatic Life Ammonia Criteria

ORSANCO should adopt the USEPA's new recommended criteria to protect sensitive mussel species. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC)

Supports ORSANCO's review of the USEPA's new recommended ammonia criteria. (PADEP).

Support adoption of USEPA's new recommended ammonia criteria but also recommends elimination of temperature-based modifications that permit higher concentrations during periods when juvenile fish are not present. (USFWS).

USEPA's new ammonia criteria are necessitating unaffordable upgrades for municipalities. Recommends conducting an economic impacts evaluation. (SD1).

Site-specific ammonia criteria should be developed based on the mussel species present in the Ohio River. (WVMA).

Implementation of USEPA's new criteria will require significant new treatment requirements for some discharges which should be considered. They are based on toxicity tests performed on short-lived early life stage mussels. The temporal patterns of these mussels should be considered. Revised criteria may be limited to periods that do not include high water temperatures and low flows. ORSANCO should also consider long term phase-in options. (WVMWQA).

Prohibition of Mixing Zones for BCCs

Maintain the effective date of the prohibition of mixing zones for BCCs. (KWA, KRC, OEC, ORF, PC/KWA(12 comments), SCHC, VW, WVRC, AR).

A mixing zone prohibition for BCCs is not appropriate at this time. Recommends deferring the prohibition until the much larger issues such a nonpoint sources, and development of a comprehensive control strategy are addressed. (PADEP, WVMWQA).

Revoke the mixing zone ban for BCCs because discharge limits for BCCs are based on very conservative assumptions such as ten percent of 7Q10 low flows and 95^{th} or 99^{th} percentile discharge volumes. Alternatively, a mixing zone prohibition may be appropriate where fish tissue levels are increasing or the MeHg fish tissue criterion is exceeded for two years, but should only apply to discharges with high mercury loads that have not implemented mercury reduction measures. Suggests revocation of the total mercury criterion would have bearing on these recommendations and suggests the need for a meeting. (OUG/PIAC).

Mixing zones for BCCs may permit concentrations that exceed toxicity criteria benchmarks for mussels/federally endangered species. The service contends that toxicity benchmarks for mussels must be met at the point of discharge in reaches with federally endangered mussels regardless of whether the contaminant is a BCC. (USFWS).

ORSANCO should evaluate whether the mixing zone prohibition is reasonable for the Ohio River due to different characteristics than the great Lakes, or whether there are less stringent and costly options. (UIEK, EKPC).

The prohibition on mixing zones should only be applied when there is an indication of elevated water column and fish tissue concentrations resulting from a discharge. (WVCC).

Support for current effective date in order to evaluate the appropriateness of a mixing zone prohibition for the Ohio River. (SD1).

Recommends eliminating the mixing zone prohibition and use ORSANCO's resources to assess the impacts of BCCs on the Ohio River and develop TMDLs if necessary. (WVMA).

Numeric Nutrient Criteria

ORSANCO should propose numeric nutrient criteria during this triennial review even though the current data may not be one hundred percent conclusive, as long as the scientific approach and methods are sufficiently defined and based on the best available information. (KWA, KRC, OEC, ORF, SCHC, VW, WVRC, AR).

Support for data collection and related efforts to develop numeric criteria. (PADEP).

ORSANCO should demonstrate that measured Ohio River nutrient levels result in biological shifts that cannot be attributed to other stressors. ORSANCO should also evaluate trends in nutrient concentrations and loads at lock and dam locations. (OUG/PIAC, WVMA).

Midwestern states including Kentucky are developing nutrient management strategies at this time and ORSANCO's development of numeric criteria could interfere with that process. Thus, numeric criteria should not be adopted at this time. (UIEK, EKPC).

Encouragement for additional study and stakeholder involvement with respect to reduction strategies and criteria. Progress could be made by documenting trends in nutrient-related response variables and concentrations and loads, as well as leading discussions about technologies and best practices for nutrient reduction. (SD1).

Defer adoption of numeric criteria at this time. Other options Site specific permitting and TMDLs may be a better approach. (WVMWQA).

ADDITIONAL ISSUES IDENTIFIED THROUGH PUBLIC COMMENTS

Hydraulic Fracturing Issues

Revise all radionuclide criteria to "non-detectable" and applied at the point of discharge. (KWA, KRC, OEC, ORF, PC/KWA(16 comments), SCHC, VW, WVRC).

Consider development of Bromine/Bromide wastewater discharge requirement. (KWA, KRC, OEC, ORF, PC/KWA(14 comments), SCHC, VW, WVRC).

Consider development of a Bromine/Bromide wastewater discharge requirement at a level of "non-detectable." (PC – 2 comments).

Consider development of a salinity wastewater discharge requirement. (KWA, KRC, OEC, ORF, PC/KWA (16 comments), SCHC, VW, WVRC).

Require a minimum 10-year surety bond sufficient to demonstrate financial capability for the cleanup of spills and discharges for all entities that ships, stores or transports by pipeline, hydraulic fracturing wastes. (KWA, KRC, OEC, ORF, PC/KWA(16 comments), SCHC, VW, WVRC).

Chloride Criterion (250 mg/L)

The 500 mg/L TDS criterion, as well as the 250 mg/L chloride criterion, may not be protective of sensitive mussel species in the Ohio River. These criteria should be reviewed. (USFWS).

Thallium

Revoke the non-carcinogen thallium human health criterion of 0.24 ug/L because USEPA's IRIS website indicates that a defensible reference dose for inorganic thallium does not exist. OEPA has proposed to revoke its non-drinking water thallium human health criterion for the same reason. (OUG/PIAC).

Aquatic Life Criteria for Metals

ORSANCO should expand its total suspended solids based translator table (in Section 5.3) to include As, Cd, Cr, Pb, Hg, and Ag, or reference its 2006 translators report such that alternative total recoverable metals can be used in permits. (OUG/PIAC, EKPC, UIEK).

Revise current metals criteria for aquatic life to incorporate a Water Effects Ratio (WER) as supported by the USEPA. (WVMWQA).

Consider adopting the USGS's approach to development of cadmium criteria which has been utilized by a number of states. (WVMWQA).

Upset Notifications

Upset notification requirements should conform to federal/state NPDES regulations that allow for 24 hour verbal notice and 5-day letter to the state. (WVMWQA).

Net Discharge Provisions

The net discharge provisions applicable to industrial discharges should be extended to POTWs. (WVMWQA).

Clarification of Uses

The reference to criteria suitable for contact recreation should be revised from being applicable to "months" to being applicable to "periods." (WVMWQA).

Analytical Methods

Recommend that Chapter 5.9 refer only to 40 CFR Part 136 approved methods as required under USEPA regulation as well as states permitting regulations. They do not allow for other alternatives that are list in ORSANCO's standards. (WVMWQA).

Variances

ORSANCO should consider using different terminology for "variances" in its Pollution Control Standards because such variances are different from USEPA's "variances" from water quality standards (USEPA).

General Issues

Any changes to criteria should be more stringent, not less stringent. (PC/KWA – 12 comments).

Comment agrees with ORSANCO's general approach to review of its Pollution Control Standards. (NYDEC).

Adopt numeric standards for all known pollutants (PC).

Recommended strong collaboration with ORSANCO's member states during this review (PADEP).

All criteria should be protective of freshwater mussels and present federally-listed endangered mussels, and the service offered to work cooperatively with ORSANCO. (USFWS).

All numeric criteria should align with USEPA's National Recommended Water Quality criteria. (USEPA).