

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

Categorized Comments (primarily emails) From “General Public”

15,422 third party emails through National Wildlife Federation Action Fund:

- Not in favor of proposal to remove mixing zone ban given the mercury issues in the Ohio River and that the Ohio River tops the list of most polluted rivers.

1011 third party emails through National Audubon Society:

- ORSANCO must enforce the October 2015 prohibition on mixing zones. Vote no on the proposed amendment to the mixing zone prohibition.

505 third party emails through Sierra Club:

- Maintain the October 16, 2015 deadline for the expiration of mixing zones. Invite discharges not able to meet the requirement to propose a settlement agreement or consent decree.
- Do not grant any new variances or exceptions to the standards.
- The ammonia standards must support mussels and allow them to re-populate areas where they have been extirpated.
- The 110 deg F temperature requirement does not adequately protect human health.
- The 500 mg/L TDS requirement is too high.

388 emails (possibly third party) marked “ORSANCO PCS Triennial Review Comments” stating that they are a resident of Indiana or Kentucky:

- Proposal to remove the mixing zone ban is not acceptable. All facilities should be required to meet the October 2015 deadline.
- Maintain the existing mercury standards until proposing a more stringent standard.
- Use only the new ammonia standard that will be more protective of mussels.
- Don't understand why ORSANCO would ask the public for input on the 130 individual standards (input on duration and frequency).

27 emailed comments opposed to both proposed mixing zone revisions and FirstEnergy Variance.

90 emailed comments to keep the mixing zone ban in place.

10 emailed comments with general concern about mercury in the Ohio River.

56 postcard comments to keep mixing zone ban in place.

123 signed petition from Sierra Club (Cumberland Chapter) :

- Supports Hank Grady Comments (Sierra Club Cumberland Chapter comments).
- Opposed to mixing zone proposal and FirstEnergy variance.

1 email in favor of FirstEnergy Variance.

79 Citizens of Northern Kentucky opposed to mixing zone proposal and FirstEnergy Variance (signed petition).

Results of Public Hearing (30 Attendees, 12 speakers)

- 2 speakers support continuing ban on mixing zones (opposed to mixing zone proposal).
- Mike Miller who stated that he represents Rivers Unlimited – see written comments later.
- 1 speaker in favor of having access to waters that support healthy recreation.
- 1 speakers against mixing zone proposal and FirstEnergy variance.
- 1 speaker against mixing zone proposal, FirstEnergy variance, and wants enforcement.
- Tim Joice, KWA – see written comments later.
- Judy Peterson, KWA – see written comments later.
- Rich Cogen, Ohio River Foundation – see written comments later.
- Tim Guilfoile on behalf of International Federation of Fly Fishers, 34 clubs, 12,000 members. Written comments will mirror KWA. Will work with congressional representatives to defund ORSANCO and work with EPA.
- Hank Grady, Cumberland Chapter Sierra Club – see written comments later.
- Rich Koster, Chair Northern Kentucky Sierra Club – ORSANCO accountability to the public and FirstEnergy accountability to ORSANCO.

Detailed Comments from Organizations

Rivers Unlimited

- Hg levels are sustained in fish since 1997 and tissue concentrations appear to trend upward in a downstream direction.
- Tripling the effluent concentration as proposed in the FirstEnergy variance could result in a 3000-fold increase in Hg concentrations in fish tissue due to the specific hydrology at that location.
- The TDS limit of 500 mg/L for the protection of drinking water may not be protective of aquatic life.

Kentucky Waterways Alliance (KWA)

- The mixing zone ban for BCCs by October, 2015 must be retained.
- The variance procedure for the mixing zone ban must be removed.
- The existing total mercury water quality criterion must be retained.
- If ORSANCO retains the variance procedure, all permittees must agree by October 2015 to implement necessary controls and substantiate their request with information on treatment options/costs, options for elimination or reduction of mercury, and project discharge levels. ORSANCO must receive regular reports from variance holders on their discharge of mercury, developments in treatment technologies with costs, and results of annual water and fish monitoring requirements.
- Variance holders should make defined payments into a fund to support mercury research.
- ORSANCO should prepare an annual report on discharges with mixing zones for mercury, including the level of mercury in each discharge, the cumulative discharge of mercury, and control technology options. The report should be adopted into the standards.
- KWA supports the new ammonia criteria, but only with the mussels present tables.
- ORSANCO should clarify its temperature criteria for aquatic life that it also applies inside and outside the mixing zone.
- Regarding the specification of frequency and duration, ORSANCO should refer to EPA's National Recommended Water Quality Criteria.
- KWA made several recommendations for future triennial reviews.

Ohio River Foundation

- Adopts KWA's comments.
- Specifically states opposition to the allowance of mixing zones for BCCs and the FirstEnergy variance.

Sierra Club, Cumberland Chapter (over 4,800 members)

- ORSANCO must set and maintain its standards to reduce mercury pollution.
- The water quality mercury criterion should be retained along with the "not to exceed" requirement. Changing the "not to exceed" requirement would constitute "backsliding" which is prohibited by the Clean Water Act.
- The mixing zone prohibition with the October 2015 deadline must be retained.
- ORSANCO should not be in the business of granting variances due to the lack of opportunity for meaningful judicial review.
- ORSANCO must deny all current and future variance requests.
- ORSANCO must invite all discharges not able to meet the mixing zone prohibition by October 2015 to "confess judgment" and propose a settlement agreement or consent decree.
- The 500 mg/L TDS standard is too high.
- Supports the new ammonia standards but only with the mussels present tables.
- The 110 deg F temperature criterion does not protect human health.
- Question why ORSANCO is opening the door to weakening all water quality standards (request for public input on frequency/duration).
- Question why POTWs are excluded from the requirement to report upsets, bypasses and spills.

Ohio Valley Environmental Coalition

- Oppose removal of the ban on mixing zones for BCCs. The West Virginia DHHR has already listed the Ohio River as impaired for fish consumption due to mercury.
- Supports proposed clarification of the human health temperature criterion.
- Recommend aquatic life temperature criteria also apply inside and outside the mixing zone.
- Supports the proposed ammonia criteria, but with mussels present tables only.
- Stated additional concerns about "fracking" and bromide levels.

West Virginia Municipal Water Quality Association

- Supports proposed revisions to the mixing zone ban. The current requirements are impractical for POTW discharges.
- Recommends specific changes to the mixing zone proposal, subsection 1(ii) criteria: "The concentration and duration of the discharge, bioaccumulation factors and exposure considerations for each BCC for which the mixing zone is sought to be continued, and for POTWs whether the POTW collection system is a meaningful source of BCC loadings of the BCC loadings originate in source waters or from other generic environmental sources."
- Recommends the following addition to the section on variances:
"Variances to the aquatic life criteria for ammonia may be granted by the permitting authority in the event of substantial adverse economic or social impact from the immediate application of the criteria. Such variances may incorporate a phase-in of new treatment technologies and alternate permitting parameters under Chapter 4 (Mixing Zones) and Sections 5.2 (Critical Flow) and 5.3 (Wastewater Discharges). The permittee shall submit an application to the permitting authority which includes..."
- Frequency and duration for human health criteria are effectively addressed through proper designation of design stream flow. The use of 7Q10 for human health non-carcinogens is incorrect. For criteria

based on consumption of fish or fish and water, the correct design flow is 30Q5, and the harmonic mean for criteria exerting effects over lifetime or particularly long-term (EPA Technical Support Document for Water Quality-Based Toxics Control section 4.6.1).

WVDEP

- Regarding the mixing zone prohibition, asks ORSANCO to clarify its interpretation of “new discharges”. For example, does it include discharges in existence prior to October, 2003, but that since have expanded their discharge to include those from new FGD wastewater?
- Regarding the proposed mixing zone revisions, the determination of “as soon as practicable” should be the responsibility of ORSANCO, not the permitting authority (rationale provided).
- ORSANCO should note that if it moves forward with the mixing zone proposal transferring authority to the permitting agency, that the criteria for determining compliance and how compliance is obtained also transfers to the permitting agency.

SD1

- ORSANCO should update the mercury criterion to be consistent with current science and USEPA which dropped its 0.012 ug/L criterion.
- Should ORSANCO retain the mercury criterion, it should be applied as an annual average with an allowable exceedance frequency of once in three years.
- Supports the clarification to the TDS criterion.
- ORSANCO should not adopt the federal ammonia criteria during this triennial review, as Oregon is currently the only state to do so. Instead, ORSANCO should compile additional information (specifics included with comment).
- Regarding the request for input on frequency and duration, ORSANCO should allow adequate time for stakeholder input.
- SD1 supports the proposed revisions regarding the notification of upsets and bypasses.

ORSANCO POTW Advisory Committee

- Points out that many facilities currently do not have mercury limits. Requests that existing facilities that receive new limits for mercury be allowed adequate time to use mixing zones until they can comply with new requirements.
- POTWs were not designed to remove mercury and therefore should not be subject to more stringent mercury regulations.
- Mercury criteria should be applied as an annual average.
- Supports the proposed clarification to the TDS criterion.
- Regarding the ammonia proposal, a more holistic approach should be taken on nitrogen limits. Design and operation of POTWs for nutrients control is best accomplished with an overall goal rather than piecemeal with ammonia criteria.
- Regarding the request for input on duration and frequency, ORSANCO should undertake an effort to obtain further stakeholder input.
- Supports the proposed revisions regarding upsets and bypasses.

Greater Cincinnati Water Works

- Does not support the proposed revisions to the mixing zone provisions.
- Supports proposed revisions regarding TDS clarification.
- No objection to the proposed ammonia revisions.
- Supports proposed revisions regarding the temperature clarification.

- Supports proposed revisions regarding the notification of upsets and bypasses.

Keepers Of The Mountains Foundation

- There is no scientific basis for the use of mixing zones for BCCs.
- Revision of the total mercury criterion is not warranted.
- Does not support the FirstEnergy variance due to the lack of work to identify sources or use of best technology for mercury removal.
- Does not support future variances for Koppers, Mountain State Carbon, and Toronto (rationales stated).

League of Women Voters of West Virginia

- Opposed to the proposed revisions to the mixing zone ban.
- Supports ORSANCO's work on nutrients.
- Urges ORSANCO to set standards for the protection from "fracking" operations.

Kentucky Environmental Foundation

- Address concerns around rising levels of mercury contamination.
- Maintain the existing total mercury water quality criterion.
- Develop numeric nutrients criteria.
- Set standards for TENORM, bromide and other constituents associated with "fracking".

Three Rivers Waterkeeper

- The mixing zone ban for BCCs must be retained.
- The variance procedure for mixing zones must be removed.
- The existing mercury water quality standard must be retained.
- If ORSANCO does retain the variance procedure, it must ensure sufficient safeguards are in place and justifications for continuing and variances.
- ORSANCO must require milestones for progress on mercury minimization and demonstrated progress on reducing mercury.
- Variance holders should submit regular progress reports to ORSANCO including information on loadings, developments regarding mercury removal technologies, costs, and results of required annual water and fish monitoring programs.
- Variance holders should make defined payments to a fund for mercury research.
- ORSANCO should prepare an annual report on the status of all of its variance holders (specifics information listed).
- Adopt new ammonia criteria, but only with mussels present tables.
- ORSANCO should clarify its temperature criteria for aquatic life to apply both inside and outside the mixing zone.
- ORSANCO should refer to the EPA's National recommended Water Quality Criteria regarding the specification of frequency and duration.
- ORSANCO should propose criteria for nutrients and nutrient-related response variables such as microcystin and chlorophyll-a.
- ORSANCO should propose standards for various constituents of TDS (listed).
- Set a "non-detectable" threshold for TENORM and bromide, and investigate various other constituents found in "fracking" wastes.

Environmental Law & Policy Center

- The mixing zone ban must be retained.
- The variance procedure for mixing zones must be removed, it is inadequate to ensure protection of the uses.
- The existing mercury water quality criterion must be retained.
- If ORSANCO does retain the variance procedure, it must ensure sufficient safeguards are in place and justifications for continuing and variances.
- ORSANCO must require milestones for progress on mercury minimization and demonstrated progress on reducing mercury.
- Variance holders should submit regular progress reports to ORSANCO including information on loadings, developments regarding mercury removal technologies, costs, and results of required annual water and fish monitoring programs.
- Variance holders should make defined payments to a fund for mercury research.
- ORSANCO should prepare an annual report on the status of all of its variance holders (specifics information listed).
- Adopt new ammonia criteria, but only with mussels present tables.
- ORSANCO should clarify its temperature criteria for aquatic life to apply both inside and outside the mixing zone.
- ORSANCO should refer to the EPA's National recommended Water Quality Criteria regarding the specification of frequency and duration.
- ORSANCO should propose standards for various constituents of TDS (listed).
- Set a "non-detectable" threshold for TENORM and bromide, and investigate various other constituents found in "fracking" wastes.

Hoosier Environmental Council

- Same as Environmental Law & policy Center immediately above and others.

Knob and Valley Audubon Society

- Opposed to mixing zone proposal that eliminates the October 2015 deadline.
- Enforce the prohibition on mixing zones.
- Immediately initiate a TMDL for mercury.
- Asks IDEM and ORSANCO to respond to how and when IDEM will proceed to promulgate regulations in Indiana's standards to eliminate mixing zones for BCCs.

Oxbow Of Indiana

- Supports comments of Rivers Unlimited.
- Would have expected more stringent standards to reduce allowable discharges. At a minimum, ORSANCO should hold the line on existing discharge standards.

Chemical Industry Advisory Committee

- Do not transfer responsibility for implementing the mixing zone ban to the states. Instead, eliminate the ban as there is no scientific basis for it.
- Supports reassessment of the total mercury water quality standard, and in the meantime, the standard should be implemented as not to be exceeded more than once in three years.
- Supports clarification to the TDS standard that it applies at drinking water intakes.
- Recommends that ORSANCO address the presence/absence of mussels before or in tandem with the adoption of the new ammonia criteria.

- Regarding temperature criterion, recommends that ORSANCO define “any location where public access is possible.”
- Supports adoption of EPA’s frequency & duration recommendations which include a one-hour average for acute aquatic life criteria and a four-day average for chronic aquatic life criteria. Both of these averages should not be exceeded more than once in three years.
- Opposed to the addition of “spills” to the list of notification requirements because it is duplicative of existing state and federal programs, and because “spills” are not defined by ORSANCO.

West Virginia Chamber

- Supports comments of the ORSANCO Chemical Industry Advisory Committee.
- Recommends elimination of the mixing zone prohibition.
- Urges reassessment of the total mercury water quality criterion. It is not in line with USEPA’s recommended criteria.
- Supports clarification that the TDS criterion applies at drinking water intakes.
- Conduct studies to determine the presence absence of mussels for application to the proposed ammonia criteria.
- Regarding temperature criterion, recommends that ORSANCO define “any location where public access is possible.”
- Supports adoption of EPA’s frequency & duration recommendations which include a one-hour average for acute aquatic life criteria and a four-day average for chronic aquatic life criteria. Both of these averages should not be exceeded more than once in three years.
- Opposed to the addition of “spills” to the list of notification requirements because it is duplicative of existing state and federal programs, and because “spills” are not defined by ORSANCO.

WV Manufactures Association

- Supports removal of the October 2015 deadline for the mixing zone prohibition, but recommends complete elimination of the mixing zone prohibition.
- If the mixing zone ban is retained, recommends that ORSANCO make the determination of “as soon as practicable” with consultation with the state permitting authorities.
- ORSANCO should follow USEPA’s lead and remove the total mercury criterion of 0.012 ug/L.
- WV’s fish tissue methylmercury criterion is 0.5 mg/kg based on EPA’s recommended approach to develop regionally-appropriate criteria due to differences in fish consumption patterns. ORSANCO should make allowance for use of these regionally-appropriate criteria, or conduct its own fish consumption surveys.
- ORSANCO should adopt guidance for determining the presence/absence of mussels with regard to its proposed ammonia criteria.
- Supports adoption of USEPA’s recommended frequency and duration values for its criteria.
- Opposed to the addition of “spills” to the list of notification requirements because it is duplicative of existing state and federal programs, and because “spills” are not defined by ORSANCO.

Axiall Corporation (submitted by Gradient)

- Urges ORSANCO to give due weight to the Ohio River specific conditions and data that have been collected by ORSANCO and other organizations when making its decision about mixing zones. The decision to eliminate mixing zones in the Great Lakes was based on hydrologic conditions not present in the Ohio River.
- ORSANCO should adopt the scientifically-sound approach used by the USEPA in its decision to drop the total mercury water quality criterion of 0.012 ug/L.

- Additionally, the original criterion of 0.012 ug/L was developed as a methylmercury criterion by the USEPA, but conservatively applied as a total mercury criterion.

Valley Converting (submitted by Amendola Engineering)

- ORSANCO should consider removing the mixing zone prohibition until information and data are collected and evaluated to make a sound scientifically-based decision.
- The standards should provide for a *de minimus* cutoff regarding the mixing zone prohibition (specific language offered). Valley Converting's mercury discharge is less than 0.01 percent of the assimilative capacity of the river.
- The Ohio River is not impaired for mercury, and as such, a blanket prohibition on mixing zones is unnecessary.

AK Steel

- Recommends elimination of the mixing zone ban.
- Conduct studies to better understand air emissions and atmospheric deposition, and surface runoff from contaminated soils on Ohio River mercury levels.
- Complete pool-by-pool assessments for mercury similar to what was submitted by Mountain State Carbon in their variance application.
- Continue ORSANCO's water and fish monitoring programs for mercury.
- Increase Ohio River water monitoring for mercury to better understand relationships with flow.
- Conduct studies to understand relationships between water concentrations and fish tissue concentrations for mercury.
- Conduct studies to understand the fate of mercury in the Ohio River.
- Conduct studies to understand the methylation processes in the Ohio River.

Constellium Rolled Products-Ravenswood LLC

- Adopts comments of ORSANCO Chemical Industry Advisory Committee, Ohio Utility Group and the West Virginia Manufacturers Association.
- Recommends elimination of the mixing zone ban, there is no scientific basis for it.
- If the mixing zone ban is retained, the current deadline should be extended to 2020 or later. To allow ORSANCO adequate time to understand the science.
- Does not support the "as soon as practicable" deadline due to the increased uncertainties associated with such a deadline.
- The total mercury water quality criterion of 0.012 ug/L is not scientifically sound.

FirstEnergy

- Until a permitting authority imposes ORSANCO's standards in a permit, ORSANCO's standards are not applicable to the discharge. In the absence of a permit condition, there is no obvious path forward. Pleasants had no expectation that in 2013 it would be confronted with a mercury limit. The Company therefore restates its strong objection to the characterization of the regulatory history of the Pleasants Power Station as having been in any manner remiss or ill informed of the status of the science and regulatory law relative to mercury.
- The two-year variance proposed by ORSANCO does not allow adequate time to conduct the comprehensive evaluation necessary to conduct the work to achieve the required mercury reductions.
- Pleasants had a mercury discharge concentration of 0.0554 ug/L in 2009 and believes there is a possibility of these discharge levels recurring. Therefore, the effluent values in the proposed variance of

0.022 ug/L and 0.044 ug/L are too stringent. They recommend that ORSANCO adopt WVDEP's interim limits of 0.187 ug/L and 0.577 ug/L.

- Indicates it is appropriate to submit their first progress report on January 25, 2016 and semi-annually thereafter.
- Recommends that the starting date for monthly water sampling begin December 1, 2016, and the starting date for fish monitoring begin January 1, 2016.

Ohio Utility Group

- The mixing zone ban is not appropriate to the Ohio River. The Ohio River's hydrology is much different from the Great Lakes, which is what the mixing zone ban was originally promulgated to protect. In addition, the EPA stated that another reason was the mercury fish consumption advisories on the Great Lakes, whereas there is only one small segment of the Ohio River covered by a mercury fish consumption advisory.
- The "as soon as practicable" effective date is insufficient.
- ORSANCO needs to further study mercury before re-evaluating the criterion.
- Options in lieu of the mercury criterion include: 1) Framework whereby the fish tissue criterion is used to determine reasonable potential, and if RP is determined, then allow the permittee to develop site-specific criteria, or 2) Utilize the water and fish criteria, but allow the permittee to develop site-specific criteria using a methylmercury translator.
- Regarding the proposed ammonia criteria, recommend ORSANCO develop guidelines for determining mussels presence/absence.
- ORSANCO should revoke its human health temperature criterion, there is no scientific basis for it. ORSANCO does not have jurisdiction under the Compact to regulate "heat" or condenser cooling water.
- ORSANCO must define the term "spills" so it is clear what must be reported under the proposal.

Utility Information Exchange of Kentucky

- Supports elimination of the October 2015 deadline and transferring responsibility to the permitting authority.
- ORSANCO should re-evaluate its total mercury water quality criterion, as it appears to be more stringent than many of the states.
- The 110 deg F temperature criterion is not appropriately set. In addition, the language should be revised such that the criterion applies at locations that could reasonably be accessed by recreational swimmers.
- Regarding the request for input on frequency and duration, ORSANCO should make it clear that the averaging periods used by the permitting authorities will control the issuance of NPDES permit limits.
- ORSANCO should define the criteria for reporting spills, which should exclude spills not reportable under federal requirements.
- Supports the clarification that the TDS standard applies at drinking water intakes.
- The authority to grant variances should lie with the state permitting authorities, not ORSANCO.

NGR Power Midwest

- Supports the mixing zone proposal and the allowance of variances to the mixing zone prohibition.

West Virginia Rivers Coalition

- Comments specifically supported by 278 citizens.
- The mixing zone ban for BCCs by October, 2015 must be retained.
- The variance procedure for the mixing zone ban must be removed.
- The existing total mercury water quality criterion must be retained.

- If ORSANCO retains the variance procedure, all permittees must agree by October 2015 to implement necessary controls and substantiate their request with information on treatment options/costs, options for elimination or reduction of mercury, and project discharge levels. ORSANCO must receive regular reports from variance holders on their discharge of mercury, developments in treatment technologies with costs, and results of annual water and fish monitoring requirements.
- Variance holders should make defined payments into a fund to support mercury research.
- ORSANCO should prepare an annual report on discharges with mixing zones for mercury, including the level of mercury in each discharge, the cumulative discharge of mercury, and control technology options. The report should be adopted into the standards.
- KWA supports the new ammonia criteria, but only with the mussels present tables.
- ORSANCO should clarify its temperature criteria for aquatic life that it also applies inside and outside the mixing zone.
- Regarding the specification of frequency and duration, ORSANCO should refer to EPA's National Recommended Water Quality Criteria.
- Made several recommendations for future triennial reviews.