Responsiveness Summary To Comments Received During Public Comment Period On Three Variances From Pollution Control Standards Mixing Zone Prohibition: Koppers, Inc., Mountain State Carbon, LLC and Valley Converting Company, Inc.

The comments received are summarized below. The response to all comments is as follows:

The 2015 revisions to the Pollution Control Standards replaced the October 16, 2015 effective date for the prohibition of mixing zones for BCCs for pre-2003 discharges, with "as soon as practicable as determined by the permitting authority." The state permitting agencies will implement the mixing zone prohibition for pre-2003 discharges of BCCs "as soon as practicable" as determined by the agencies. As a result, the Commission determined that the variance requests to its mixing zone prohibition were no longer necessary. Therefore, the three pending variance requests were denied at the October 2015 ORSANCO meeting. For this reason, comments received are deemed resolved.

Public Hearing Statements (10 attendees, 5 speakers)

Amendola Engineering on behalf of Valley Converting

- See written summary below and hearing record.

AK Steel/Mountain State Carbon (2 speakers)

- See written summary below and hearing record.

West Virginia Rivers Coalition

- See written summary below and hearing record.

Ohio Valley Environmental Coalition

- See written summary below and hearing record.

Comments from General Public

107 individual comments from the general public/concerned citizens specifically against the three variances, against variances in general, or against mercury in general.

Kentucky Waterways Alliance (KWA)

- Comments pertain primarily to Koppers and Mountain State Carbon variances. Regarding Valley Converting, encourage use of existing Clean Water Act permitting mechanisms for a viable compliance timeline.
- ORSANCO should deny the variances.
- If variances are granted, ORSANCO should require more comprehensive fish and water sampling (at least ten samples each from trophic level 3 and 4 fish).
- ORSANCO's must not issue a variance that becomes incorporated into an NPDES permit for 5 years or until the permit is renewed with no ability for ORSANCO to reconsider its variance should new information warrant revisiting the variance.

- None of the three variances meets the requirements set forth by USEPA in its August 21, 2015 new rule governing variances.
- None of the three variances meets ORSANCO's own requirements
- Koppers application does not show its total contribution of mercury (no mass discharge data or TRI mass discharge data).
- There is insufficient Ohio River data (water and fish) to determine Koppers impact on the Ohio River.
- Koppers application does not demonstrate that Ohio River designated uses will be maintained and that water quality criteria will be met.
- Koppers has had CWA compliance violations in 8 of the last 10 quarters, two categorized as "significant noncompliance", which should be considered.
- Mountain State is not complying with its current interim permit limits. They have been in "significant non-compliance" for both water and air for the entire last three years.
- Mountain State has provided no data to show that its discharge is not violating water quality criteria (TRI shows 10 pounds mercury released 2012-2014).
- ORSANCO has documented increasing mercury trends in trophic level 4 fish. ORSANCO has reported a risk of fish to exceed the methylmercury criterion at water concentrations less than the water quality criterion.
- Mountain State Carbon's application does not demonstrate that Ohio River designated uses will be maintained and that water quality criteria will be met.
- Recognize that Valley Converting's mercury discharge is of a lower order than Koppers and Mountain State Carbon.
- Valley Converting is conducting a good faith effort to reduce its mercury discharge.
- Recommend OEPA include a rigorous and enforceable compliance schedule in the NPDES permit requiring them to implement new treatment measures, rather than an ORSANCO variance.
- Absent a demonstration that sufficient mercury reductions are not attainable with improved TSS removal processes, a variance for Valley Converting is not appropriate.
- ORSANCO must not issue these variances until significant modifications to the proposed variances are made to ensure the facilities will make swift improvements at their facilities.

Ohio River Foundation

- Requests ORSANCO deny the three variances. ORSANCO must maintain the existing deadline for the mixing zone ban.
- The variances result in the avoidance of related expenses which provides a competitive advantage for non-compliance.
- All industries are capable of meeting the mixing zone ban.
- The Ohio River's flow does not cause discharged mercury to disappear. Mercury still bioaccumulates as in the Great Lakes.
- All applicants have provided weak rationale as to why they have not evaluates their mercury discharge or updated their mercury treatment.
- There is no justification for delay in eliminating mixing zones for BCCs in light of their well-documented impacts to human health.
- In light of the two approved variances, and now the three pending variances, ORSANCO should no longer consider itself a pollution control agency dedicated to protecting the Ohio River.

Ohio Valley Environmental Coalition

- Please deny the three variance applications.

- These corporations were given twelve years to comply. There should be consequences for companies that don't comply.
- The Ohio River already suffers the most industrial pollution in the nation.
- Many people along the Ohio River consume its fish, which is especially true for impoverished families.
- There are fish advisories for the Ohio River, but a lack of Ohio River fish advisories specifically for mercury, while there are abundant fish advisories for mercury on tributaries to the Ohio River.
- Please make it clear to the public how much mercury is in Ohio River fish.

League of Women Voters of West Virginia

- Strongly opposes the three proposed variances.
- The variances are unfair to other corporations that meet their limits.

Environmental Law & Policy Center

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 Converting, encourage use of existing Clean Water Act permitting mechanisms for a viable compliance
 timeline.
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- ORSANCO's must not issue a variance that becomes incorporated into an NPDES permit for 5 years or until the permit is renewed with no ability for ORSANCO to reconsider its variance should new information warrant revisiting the variance.
- None of the three variances meets the requirements set forth by USEPA in its August 21, 2015 new rule governing variances.
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- Koppers has had CWA compliance violations in 8 of the last 10 quarters, two categorized as "significant noncompliance", which should be considered.
- Mountain State is not complying with its current interim permit limits. They have been in "significant non-compliance" for both water and air for the entire last three years.
- Mountain State has provided no data to show that its discharge is not violating water quality criteria (TRI shows 10 pounds mercury released 2012-2014).
- ORSANCO has documented increasing mercury trends in trophic level 4 fish. ORSANCO has reported a risk of fish to exceed the methylmercury criterion at water concentrations less than the water quality criterion.
- Mountain State Carbon's application does not demonstrate that Ohio River designated uses will be maintained and that water quality criteria will be met.
- Recognize that Valley Converting's mercury discharge is of a lower order than Koppers and Mountain State Carbon.
- Valley Converting is conducting a good faith effort to reduce its mercury discharge.
- Recommend OEPA include a rigorous and enforceable compliance schedule in the NPDES permit requiring them to implement new treatment measures, rather than an ORSANCO variance.

- Absent a demonstration that sufficient mercury reductions are not attainable with improved TSS removal processes, a variance for Valley Converting is not appropriate.
- There is still considerable uncertainty whether Ohio River mercury levels are unsafe. Therefore, urge ORSANCO to deny the three variances.

West Virginia Rivers Coalition

- A survey found that 76% of WV residents supported fining or shutting down facilities that cannot meet pollution standards in time. Only 3% supported relaxing standards.
- ORSANCO is not considering the potential cumulative effects of allowing all of these facilities mixing zones.
- ORSANCO must eliminate the variance procedures.
- The timeline of 3-5 years for compliance is excessively long.
- The proposed variances fail to directly address what happens if monitoring shows adverse impacts.
- Recommend the variances require payments into a fund to support mercury research and discharge reduction, as an incentive to work quickly towards reducing discharges.
- ORSANCO should consider that Mountain State Carbon has been in "significant non-compliance" for Clean Water Act violations for the last four quarters.
- Comments pertain primarily to Koppers and Mountain State Carbon variances. Regarding Valley Converting, encourage use of existing Clean Water Act permitting mechanisms for a viable compliance timeline.
- ORSANCO should deny the variances.
- If variances are granted, ORSANCO should require more comprehensive fish and water sampling (at least ten samples each from trophic level 3 and 4 fish).
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- Mountain State Carbon's application does not demonstrate that Ohio River designated uses will be maintained and that water quality criteria will be met.
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- Valley Converting is conducting a good faith effort to reduce its mercury discharge.
- Recommend OEPA include a rigorous and enforceable compliance schedule in the NPDES permit requiring them to implement new treatment measures, rather than an ORSANCO variance.
- Absent a demonstration that sufficient mercury reductions are not attainable with improved TSS removal processes, a variance for Valley Converting is not appropriate.

Floyds Fork Environmental Association

- Any consideration to allow more mercury in the Ohio River is unacceptable.
- Mercury does not break down, once it enters the environment it remains and bioaccumulates in the aquatic food chain, making the human consumption of fish hazardous.
- Pollution prevention is the best approach to achieving reductions.
- The statement that "Each state will approach this with a unique nature. They have better knowledge of the individual discharges than we do" is patently false
- The Ohio River suffers more industrial pollution than any other river in the nation for the last seven years.

Valley Converting (submitted by Amendola Engineering)

- Agrees that a variance is needed.
- Requests that ORSANCO would allow Valley Converting to withdraw its variance application, or its variance (if granted), at any time. They are not making this request at this time.
- Valley converting requests confirmation of the following understanding, under the provision that the mixing zone prohibition is amended as proposed, and that Valley Converting's variance is approved:
 - Until February 29, 2020 (permit expiration), ORSANCO's Pollution Control Standards Chapter 4.F would not apply to Valley Converting, and that after February 29, 2020, that Chapter 4.F would apply to Valley Converting.
- Concerned about monitoring requirements and associated costs as follows:
 - Valley converting's discharge of mercury is negligible. Complete elimination of the discharge would result in an unmeasureable reduction of 0.0004 ng/L at Ohio River low flows.
 - Annual monitoring cost of \$70,000 is excessive for a small business (family-owned business employing 50 people).
 - o Mercury is present in trace quantities in its recycled paper feedstock.
 - o Upgraded its treatment system in 2011. Since then, its average mercury discharge is 12.3 ng/L which is just above the water quality criterion of 12 ng/L.
 - At their average discharge, the water quality criterion of 12 ng/L in the Ohio River would be achieved almost immediately.
 - The cost to install treatment to consistently meet 12 ng/L is out of proportion to the benefits. Removal costs are estimated to be \$200,000,000-\$1,000,000,000 per pound of mercury removed.
 - The Pike Island pool is already in attainment with the water quality and fish tissue criteria. A variance issued to Valley Converting will not change that.
 - The \$70,000 annual monitoring cost would prevent Valley Converting from updating equipment and/or improving manufacturing processes which are vital to staying competitive in their industry.
 - Requests that effluent limits in the variance align with the NPDES permit, which is 86 ng/L monthly average for mercury.

AK Steel/Mountain State Carbon

- MSC is a coke facility. Mercury is present in its raw product. MSC has advanced chemical/biological wastewater treatment systems.
- MSC's treatment systems exceed USEPA's BAT as specified in 40CFR420.
- Treatment systems remove 95-97% of the mercury.
- Reduced its discharge of mercury by 70% since 2013.
- Has invested \$11,000,000 in treatment systems.
- Estimates lowest cost solution to no mixing zone is \$10,000,000 capital cost and over \$1,000,000 annual operating cost.
- MSC has invested considerable effort and funds as noted above in the last twelve years in an effort to meet new requirements.
- AK Steel acquired MSC less than one year ago and is making substantial increased efforts towards maintaining regulatory compliance.
- Requests proposed variance be issued for a 5 year term. If not issued for 5 years, then state that the intent is to reissue the variance after its expiration.
- Requests proposed variance effluent limits be revised to 330 ng/L monthly avg. and 678 ng/L daily max.
- Sampling during winter months and high flows is excessive. Also, because MSC and Koppers facilities are adjacent, sampling by both companies during the same time periods is excessive.
- Requests that water sampling be conducted during April through November, and that MSC and Koppers alternate those months so that only one company is sampling during any given month.
- Request that fish tissue sampling be required every other year beginning in 2016, and that MSC and Koppers alternate those years such that each company samples fish once every two years.
- Because Valley Converting's mercury discharge is very small, and Valley Converting is located in proximity to Koppers and MSC, recommend that fish and water monitoring requirements for Valley Converting be removed, and rely on data collected by MSC and Koppers.

Koppers

- The current term of the proposed variance is until June, 30, 2016 when the current permit expires, which is only eight months.
- Recommend the term of the variance be at least three years, or that it include a statement that the intent is to renew the variance with the 2016 permit renewal.
- Sampling during the winter may be hazardous, and the water sampling frequency is excessive.
- Recommend water sampling once every three months between March 31 and December 31.
- Recommend alternating sampling with MSC since the facilities are adjacent, such that only one company is sampling during a given time.
- Koppers believes the fish sampling requirement is excessive, and recommends fish tissue sampling only if monitoring results show an increase in mercury concentrations above established "routine" levels ("routine" would be the average concentration within the regulatory mixing zone).