

Ohio River Valley Water Sanitation Commission

Water Quality Standards Alternative Summary

Alternative Title: Terminate ORSANCO's PCS and rely upon state and federal programs provided for and mandated under the Clean Water Act and related state statutes	Alternative Number: 1
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ALTERNATIVE DESCRIPTION

- Alternative 1: Eliminate the Pollution Control Standards Program and defer to the requirements of the Clean Water Act and member state water quality regulations.

KEY CONSIDERATIONS (Pros & Cons):

- This alternative would free up resources within ORSANCO to be reprogrammed to other Commission activities. However what may or may not be lost? Is the Clean Water Act with its federal and state procedures, budget and staffing sufficient to accomplish our Compact goals or will something be lost? Are we miss-directing limited resources on an activity that is duplicative to each of our member states? Where is the value added?
- All states are mandated by the Clean Water Act to adopt and submit for USEPA approval water quality standards that accomplish equivalent (if not identical) goals as those contained in the Compact. ORSANCO's standards can be viewed as redundant, complimentary or perhaps even in conflict with federally approved state adopted standards. Additionally status and implementation of ORSANCO standards varies to some degree from state to state. Some states implement ORSANCO standards directly into their permitting and compliance programs while one state is prohibited from implementing our standards, that state can only implement regulations adopted by the state through its own administrative process. This may also be the case to some extent in other states as well.
- Assessment of this alternative should consider the extent to which ORSANCO's standards program adds value over and above the standards activities mandated and performed by each member state pursuant to the CWA, the resources allocated to support ORSANCO's standards program and whatever supplemental resources (budget and staff time of both the Commission and participating states) to achieve consistency among member states. If we are to retain the program as is or in some modified form, must we allocate resources to develop the capacity to administer the program or can we continue to defer virtually all administration, compliance tracking and enforcement to other parties whether they be member states, federal agencies or other parties? If we are to continue with a standards program, how do we resolve the conflict that exists between states that are prohibited from administering standards or regulations through its permit programs that have not been duly adopted by the administrative processes required within those states? Pursuing adherence to ORSANCO standards by individual states operating within their own administrative procedures may lead to legal action and/or public scrutiny to the detriment of both parties.

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BUDGET/STAFF IMPLICATIONS:

- Staff time and any financial expenditures currently allocated to support PCS activities can be reprogrammed to support monitoring, assessment and other activities that are currently underfunded.

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Water Quality Standards Alternative Summary

Alternative Title: Clean Water Act Alternative to ORSANCO PCS Rules	Alternative Number: 2
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ALTERNATIVE DESCRIPTION

In recognition of the successes of the federal Clean Water Act and the related state water pollution control programs of member states, the Pollution Control Standards (PCS) should be revised by adding a provision that recognizes that water quality standards and criteria, as well as mixing zone requirements, and other provisions of the PCS are being adequately addressed by member states in accordance with programs appropriate for implementation of the federal Clean Water Act. To the extent that all member states are operating under such programs, the Commission may conclude that it need not continue the triennial review process related to the water quality criteria (and related provisions) of the PCS.

KEY CONSIDERATIONS (Pros & Cons):

The PCS is currently divided into three substantive categories: (1) designated uses, including a single “free from” mandate) (2) wastewater discharge requirements and (3) water quality criteria (and related mixing zone requirements).

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 ..."

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....”

Water Quality Standards and Mixing Zones – Unlike designated uses and wastewater discharge requirements, water quality standards and mixing zone are not mentioned in the Compact. As was observed in the “Report of the ORSANCO Ad Hoc Water Quality Standards Implementation Committee”, dated May 11, 2015, “the Compact never mentions the term “water quality standards’ ”. That Report went on to observe:

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Water Quality Standards Alternative Summary

Alternative Title: Clean Water Act Alternative to ORSANCO PCS Rules	Alternative Number: 2
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Each of the member states manage programs for implementation of the federal Clean Water Act and in many cases many of the Compact states utilize those programs to implement ORSANCO requirements.

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, we can fairly conclude that the requirements of the Compact are being satisfied by the federal Clean Water Act. Beyond the conclusion that the PCS requirements are redundant, complimentary or perhaps even in conflict with federal Clean Water Act approved programs, the resources ORSANCO expends on continual review and revision of its PCS could be much better used in many other program areas.

Accordingly, the Commission should consider adding the following as a new section of the PCS:

Member states 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, shall be deemed to be in compliance with the requirements of these Pollution Control Standards.

To the extent that all member states are implementing approved programs under the federal Clean Water Act, there would be little or no purpose for the Commission to continue the process for updating the PCS and for unnecessarily expending its limited resources on a redundant program at a time when other programs are in need for those funds. Removal of the water quality criteria(Chapter 3), mixing zone designation(Chapter 4) and portions of wastewater discharge requirements(Chapter 5) of the PCS should be sufficient to eliminate the need to triennial review.

By proceeding under this approach the public would have the full and complete protection of the federal Clean Water Act and the oversight of USEPA without the redundancy of the current PCS program.

BUDGET/STAFF IMPLICATIONS:

This alternative would allow ORSANCO to redirect resources not needed for the PCS program to be redirected to other Commission activities. ORSANCOs true value to member states and the public is in such programs 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.

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Water Quality Standards Alternative Summary

Alternative Title: Cost Effective Alternative for Standards	Alternative Number: 3
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ALTERNATIVE DESCRIPTION

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.

KEY CONSIDERATIONS (Pros & Cons):

This alternative is developed to achieve the following goals (pros):

1. Establish numerical water quality standards for the Ohio River that are protective of the intended uses.
2. Reduce the cost of developing water quality standards for ORSANCO and the states.
3. Promote consistency among states.
4. Allow flexibility to adopt alternative standards, when appropriate.
5. Streamline the process for developing the 305(b) Report.
6. Reduce the influence of campaign donors and special interest groups on the standards development and permitting processes.
7. Satisfy 106 grant work plan requirements.
8. Enhance ORSANCO's historic role as the protector of water quality of the River.

This Alternative may result in following reactions (cons):

1. Opposed by some industries and the chambers of commerce who object to any regulations, even the ones that may help them.
2. Opposed based on ideological ground by the states' rights advocates.

KEY COMPONENTS AND JUSTIFICATIONS:

States are required to adopt water quality standards that are as protective as the criteria adopted by USEPA. States are allowed to adopt less stringent standards if they can justify this deviation. An example of a good reason for adoption of less stringent standards is the absence of sensitive species that were used to develop these standards.

Recently ORSANCO staff compared the states' standards for the main stem of the Ohio River with USEPA recommended criteria. The comparison indicated that the states' adopted standards are generally not compatible with the federal standards and requirements. Also, the comparison revealed a great deal of inconsistency among the states.

Under the current system for developing standards for the main stem of the Ohio River, six states and ORSANCO develop water quality standards separately without the appropriate coordination, as evidenced by a lack of consistency among states. Even with appropriate coordination, the current system is not efficient or cost effective for industry or the public. In addition, seven entities developing standards separately for the same water body clearly has resulted in duplication of efforts and inconstancy.

If ORSANCO were the only entity to develop standards and implementation procedures for the River and states adopted these standards, the states will save considerable resources. Currently ORSANCO uses this model successfully to develop the 305(b) report for the Ohio River. Also,

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Alternative Title: Cost Effective Alternative for Standards	Alternative Number: 3
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using this approach will result in a consistent set of the standards for the River. This will be a great help to industries in the basin, who always demand consistency and predictability. Also, consistency will help the public better understand water quality issues and avoid confusion that results from this inconsistency. An example: currently states issue conflicting fish consumption advisories for the same River segment.

Under this Alternative, ORSANCO will use the federal criteria as a starting point. In certain situations ORSANCO may choose to use different criteria as a basis to develop standards. Of course states will participate in the standards development process and they may choose to deviate from ORSANCO's standards, if appropriate.

In addition, Article VI of the Compact requires ORSANCO and the states to maintain the water quality of Ohio River tributaries in a sanitary and satisfactory condition at least equal to the condition of the waters of the River immediately above the confluence. The article authorities ORSANCO to adopt standards to implement and enforce this provision. Although there may be other ways to implement this requirement, adopting numerical water quality standards is the obvious and most direct approach to comply with this provision.

Under this proposal ORSANCO is expected to identify states which do not adopt and implement standards that are compatible with ORSANCO and/or federal standards and work with these states to eliminate these deficiencies.

BUDGET/STAFF IMPLICATIONS:

1. The USEPA 106 grant represent 50% of ORSANCO's budget. This year's work plan for this grant includes the development of numerical standards for the main stem of the Ohio River. If ORSANCO decides to eliminate or severely reduce the WQS Program, the 106 grant may be negatively impacted.
2. The above mentioned approach for developing standards relies on the science developed by USEPA. ORSANCO and states will not waste resources in developing basic science unless it is absolutely needed. Also, in most cases states will adopt ORSANCO's WQS. This will save state resources and avoid duplication of efforts.
3. This approach will simplify the 305(b) report for ORSANCO and states because all the states will adopt similar water quality standards.

BACKGROUND/HISTORY:

For long time, ORSANCO successfully utilized stream standards to set water quality goals, help dischargers plan for the future, improve consistency among states, prepare 305(b) & TMDL reports and to protect the River's designated uses. The standards program should be streamlined to save resources. However, eliminating the numerical stream standards will be a step backward that will adversely impact the stream water quality and create nothing but confusion.

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Water Quality Standards Alternative Summary

Alternative Title: Selectively modify PCS after review as warranted and increase focus on harmonization of standards and their implementation among Compact states and EPA	Alternative Number: 4
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ALTERNATIVE DESCRIPTION

- Modify current Pollution Control Standards by looking at standards on an individual basis as warranted, and increase focus on the harmonization of standards and the implementation of standards by the individual states so as to restore and maintain the quality of and protect uses of the Ohio River.

KEY CONSIDERATIONS (Pros & Cons):

- Pro: Alternative provides a two-prong strategy to better integrate ORSANCO standard-setting process with the permitting and certification processes in and among the states.
- Pro: First prong of strategy would maintain concurrency between PCS and emerging biological and chemical science, relying on staff and the TEC to identify standards that are candidates for revision, adoption, or elimination during the subsequent triennial review, thus providing sound bases for permitting and WQC decisions that are protective of the water resource.
- Pro: Better integration of standards and levels of protection among compact states. Second prong recognizes that while the individual Compact states may have standards that vary in number or stringency from those adopted by ORSANCO, it is the interaction of state permitting and certification processes and those adopted standards that determine whether comparable levels of protection of uses are being achieved as among the states. To that end, the NPDES Committee will work with staff and each state to develop a more comprehensive understanding of the interaction of standards and permitting / certification processes in and among the states, with a goal of assuring that protection of uses and achievement of pollution controls needed to maintain those uses occurs throughout the Ohio River system. Where the state has not incorporated one or more ORSANCO standards into the permitting and certification processes, staff and the NPDES Committee will work with that state to assure that the state process nevertheless achieves a comparable level of protection of the designated uses.
- Pro: Could be combined with Alternative 3, which proposes to “continue to include numerical standards in ORSANCO’s rules but simply Pollution Control Standards program by adopting US EPA standards for all pollutants unless it is determined that the federal standards for a specific pollutant are not protective of the intended use.” Combined alternatives would provide a benchmark for TEC and staff review and modification of individual standards as warranted, and the exercise of comparison would help to assure that maintenance of standards in excess of the minimum standards recommended by US EPA is necessary or advisable.
- Con: Budgetary considerations for both ORSANCO Staff and NPDES Committee.

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Alternative Title: Selectively modify PCS after review as warranted and increase focus on harmonization of standards and their implementation among Compact states and EPA	Alternative Number: 4
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BUDGET/STAFF IMPLICATIONS:

- Implementation of Alternative would require maintenance of existing levels of expenditures for both Management and Technical Staff, which was estimated at roughly \$200,000 annually for the core activities, which include Standards Administration (ongoing coordination of ORSANCO's standards with state NPDES permitting, evaluation of variance requests, review of Ohio River discharger compliance, and review of State NPDES permits); and Standards Development (ongoing consideration of standards issues , evaluation of standards for possible revision, and conducting triennial reviews).

BACKGROUND/HISTORY:

Historically, the Pollution Control Standards (PCS) have included a combination of strategies to improve and protect the water quality of the Ohio River. Just as the Clean Water Act combines water quality standards and categorical effluent limitations, the PCS both designate uses and impose narrative and numeric standards to protect those uses (Chapter 3) and wastewater discharge requirements (Chapter 5) intended to also protect those uses and to reduce pollutant loading. These standards are also used to support the development of the 305(b) report.

The investigation by staff reflected that among the various states comprising the Compact, there is much variability both in the number of numerical water quality standards and in the stringency of the standards. Consistency of standards among the states is not, however, the overarching concern for the compact – the concern is that among the states, those parameters regulated *and* the manner of implementation of standards through discharge permitting and certification processes, are sufficient to coherently protect the designated uses of the Ohio River as between the states, and in restoring and maintaining the Ohio River to a healthy condition for all uses. This Alternative would work to provide better coordination between ORSANCO and the member states and among those states, and to approach standard-setting in a more nuanced manner than wholesale abandonment of the standard-setting function of ORSANCO.

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Water Quality Standards Alternative Summary

Alternative Title: Provision for states to consider the PCSs when developing state water quality standards.	Alternative Number: 5
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ALTERNATIVE DESCRIPTION

- Propose to change the ORSANCO PCS language from mandating that Compact member states adopt the ORSANCO PCS in permits issued for the main stem of the Ohio River to requiring member states give consideration of the ORSANCO PCS when developing and issuing permits. Specifically, in the ORSANCO POLLUTION CONTROL STANDARDS for Discharges to the Ohio River, 2015 Revision, CHAPTER 1: GENERAL PROVISIONS, 1.1 AUTHORITY AND PURPOSE: change paragraph 6 to read:

“Specific pollution control standards are established in these regulations and shall be considered when developing discharge permits issued under the authority of the NPDES or state discharge permitting programs when they are more stringent than:

- 1) Applicable U.S. EPA technology-based effluent guidelines required under Section 301, 304, 306, and 307 of the Federal Clean Water Act, or
- 2) Any state treatment requirements, effluent standards, or water quality-based effluent limits.”

KEY CONSIDERATIONS (Pros & Cons):

- The proposal recognizes that member states have varied approaches to meeting their obligations under the Compact, including varying approaches in their reliance on ORSANCO PCS in NPDES permits.
- The provisions of the Federal Clean Water Act and the regulations promulgated thereto collectively subsume the need for ORSANCO PCS, including TBELs as well as WQBELs.
- The proposal recognizes that ORSANCO PCS may be unnecessary and the process of promulgating the PCS is redundant of member states' triennial review of water quality standards. As such, this proposal may serve as an interim solution if the Commission determines that further review and consideration of the status of the ORSANCO PCS is warranted.
- The proposal recognizes state triennial review is transparent, requires public participation and requires EPA review and approval, as well as consultation with USFWS under Section 7 of the Endangered Species Act when standards may impact T&E species, such as exist in the Ohio River. Whereas, ORSANCO PCS are not subject to and have not undergone EPA review or consultation with the USFWS.
- Water Quality Standards promulgated by states and approved by EPA are subject to judicial review. Whereas it is unclear as to whether the ORSANCO PCS are subject to judicial review.
- It may be interpreted that Compact limits ORSANCO's authority to promulgating technology-based standards (TBELs) and does not provide specific authority for ORSANCO to promulgate water-quality based standards (WQBELs). See below.

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BUDGET/STAFF IMPLICATIONS:

- It is estimated that ORSANCO staff expend ~2 FTEs every 3 years to the triennial review process and PCS committee meetings.

BACKGROUND/HISTORY:

- What does the ORSANCO Compact require/provide for regarding water quality standards?
 - The Compact contains three provisions that can be viewed as ‘water quality standards’ in that they impose obligation on member states to control water pollution.
 - 1) The Compact contains a “pledge” to control pollution in Article 1, a general obligation on member states to cooperate in controlling pollution.
 - 2) The Compact itself contains two express pollution standards for Settleable Solids and Total Suspended Solids.
 - 3) The Compact authorizes the Ohio River Sanitation Commission to adopt and enforce additional water quality standards after notice and hearing. However, the Compact appears to limit the Commission’s authority to establishing technology-based standards (cf. water quality-based standards). Article VI contains important qualifying language that can be read to confine ORSANCO’s authority to establishing what would currently be considered *technology-based* effluent limitations, as opposed to *water quality-based* effluent limitations. The qualifying language is that ORSANOC may only require that industrial wastes be “modified or treated within a time reasonable for the construction of the necessary works.” “Within a time reasonable for the construction of the necessary works” is reasonably interpreted to mean adequate time for the necessary treatment technologies to be developed, constructed and implemented by industry. Under the Compact, ORSANCO may establish water quality standards “for administering and enforcing the provisions” in Article VI, but its authority does not appear to extend to establishing water quality -based standards.
- Nevertheless, the Compact was created prior to uniform federal and state approaches to developing and promulgating standards to control the pollution of interstate waters.
- The proposal is based on the recognition that most of the permit requirements utilized by member states, rely to a great extent on standards adopted from federally recommended 304(a) criteria (as do the ORSANCO PCS) and technology-based effluent limit guidelines, and that members states are "considering" ORSANCO PCS when issuing permits.