

Final Regulations Addressing Importation and Exportation of Water and the Discharge of Wastewater from High Volume Hydraulic Fracturing and HVHF-Related Activities



Frequently Asked Questions (FAQs)

(Revised March 28, 2023)

1. Why has the Delaware River Basin Commission (DRBC or Commission) adopted these new rules?

The Delaware River Basin Commission is a federal/interstate government agency that manages the water resources of the Delaware River Basin (the Basin). The five Commission members are the governors of the Basin states (Delaware, New Jersey, New York, and Pennsylvania) and the commander of the U.S. Army Corps of Engineers, North Atlantic Division, who represents the federal government.

On November 30, 2017, the DRBC published draft rules regulating high volume hydraulic fracturing (HVHF) in the Basin. On February 25, 2021, the Commissioners approved a final rule prohibiting HVHF in the Basin and, separately, adopted a Resolution for the Minutes directing DRBC's executive director to propose amendments to update the Commission's rules concerning importation into the Basin of water and wastewater from outside the Basin and exportation of Basin water and wastewater. The proposed and final rules also address the discharge of wastewater from HVHF and HVHF-related activities (HVHF wastewater) to waters or land within the Basin.

2. Do the adopted rules prohibit the discharge of wastewater from high volume hydraulic fracturing (HVHF)?

Yes. The Commission determined that controlling future pollution by prohibiting discharges of wastewater from HVHF and HVHF-related activities to waters or land within the Basin is required to effectuate the Comprehensive Plan, avoid injury to the waters of the Basin as contemplated by the Comprehensive Plan, and protect the public health and preserve the waters of the Basin for uses in accordance with the Comprehensive Plan. To protect the water resources of the Basin, the Commission adopted amendments to Part 440 of Title 18, Chapter III of the Code of Federal Regulations (18 CFR Part 440) and to Article 4 (Application of Standards) of the Commission's Water Quality Regulations (incorporated by reference at 18 CFR Part 410). Specifically:

- **Amended Part 440 of Title 18 of the Code of Federal Regulations** prohibits the discharge of wastewater from HVHF and HVHF-related activities to waters or land within the Basin.
- **Amended Article 4 of the Water Quality Regulations** facilitates the alignment of certain Basin state discharge permits with the Commission's amendments to 18 CFR Part 440 by incorporating into the Water Quality Regulations the prohibition on the discharge of wastewater from HVHF and HVHF-related activities.

3. What discharges of HVHF wastewater are specifically prohibited?

As defined in the regulations, “wastewater from HVHF and HVHF-related activities” means:

- (1) Any wastewater, brine, or sludge containing chemicals, naturally occurring radioactive materials, heavy metals or other contaminants that have been used for or generated by high volume hydraulic fracturing or HVHF-related activities;
- (2) Leachate from solid wastes associated with HVHF-related activities, except if the solid wastes were lawfully disposed of in a landfill within the Basin prior to [the effective date of the rule]; and
- (3) Any products, co-products, byproducts or waste products resulting from the treatment, processing or modification of the wastewater described in paragraphs (1) and (2) of this definition.

Activities about which multiple commenters expressed concern and that are prohibited by the final rule include (but are not necessarily limited to) the following:

- discharge of HVHF wastewater to waters or land within the Basin;
- road spreading of HVHF wastewater;
- injection of HVHF wastewater into deep wells within the Basin;
- disposal of HVHF wastewater in Basin landfills;
- discharge of leachate from any landfill in the Basin that accepts HVHF waste after the effective date of the final regulations, including after treatment at an onsite or off-site leachate or wastewater treatment plant; and
- spills and leaks during transport, transfer, or storage of HVHF wastewater within the Basin if not fully captured by a containment system in place throughout the duration of the spill or leak and thereafter promptly removed or remediated.

4. Do the final rules prohibit the importation of HVHF wastewater into the Delaware River Basin?

Yes, if the proposed importation of wastewater from HVHF and HVHF-related activities would result in a discharge of the imported wastewater to land or water within the Basin, with or without prior treatment. Otherwise, no. The final amendments expressly prohibit the *discharge* of treated and untreated wastewater from HVHF and HVHF-related activities to waters or land within the Basin.

Because the Commission has prohibited HVHF within the Basin and is also prohibiting the discharge of treated or untreated HVHF wastewater to land or waters within the Basin, DRBC anticipates that only low volumes of HVHF wastewater will be transported to or through the Basin. (For data that supports this view, see Response R-25 of the Comment and Response Document (CRD) adopted by the Commission concurrently with the final rule.) The number of probable spills of HVHF

wastewater during transport within the Basin and the related potential for adverse impacts on the Basin's water resources resulting from such spills are in the Commission's view reduced by these measures sufficiently to protect the Basin's water resources. Notably, storage and transportation of HVHF wastewater are activities subject to detailed state and federal regulatory programs that the Commission does not seek to replicate.

Under the adopted rule, the Commission will evaluate proposed importations of water or wastewater using the factors set forth at section 2.30.3 B. of the Water Code. Those factors include, among others, the effects of the proposed importation on aquatic ecosystems, water quality and waste assimilative capacity in the receiving streams (§§ 2.30.3 B.3.d. and B.3.e.), and the effect of the importation on the health and safety of the Basin community (§ 2.30.3 B.1). They further require the Commission to consider "alternatives that avoid an importation of water." (§ 2.30.3 B.3. intro par.). Accordingly, under the final rule, any proposed importation will be carefully evaluated to ensure it does not adversely affect the Basin's water resources or the health and safety of Basin water users.

Please see FAQs 6 and 7 below, and Responses R-25, R-31 and R-32 of the CRD for additional discussion related to concerns about the transportation and storage of HVHF wastewater.

5. *What changes have been made to the rules since they were proposed in October 2021?*

Changes made in response to comments on the proposed rule include the following:

- The final rule amending the Water Code narrows the circumstances in which the Commission may approve an exportation of water that consists of wastewater. Under the final rule, the Commission may approve an exportation of wastewater when the project sponsor demonstrates either that the wastewater is to be conveyed to a straddled or adjacent public wastewater collection system or that the wastewater may not lawfully be discharged to a public wastewater collection system in the Basin and is being exported for treatment outside the Basin at specialized waste management facilities that have all appropriate state and federal approvals.
- The final rule modified the "public health and safety needs" category of allowable exportations to make clear that any exportation under this provision must be made for the purpose of meeting public health and safety needs of the receiving system regardless of whether the exportation is intended to be temporary, short-term, or in response to an emergency.
- The final rule includes additional definitions in the Water Code for "Public wastewater collection system," "Adjacent public wastewater collection system," and "Straddled public wastewater collection system." The definition of "Adjacent public water system" has been simplified.
- In the final rule amending the Commission's Special Regulations, 18 C.F.R. Part 440 – High Volume Hydraulic Fracturing, to make explicit the scope of the prohibition on discharges of wastewater from HVHF and HVHF-related activities, the Commission added a definition of the

term “Discharge of wastewater from HVHF and HVHF-related activities,” which is defined as “an intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying, spreading, spraying, injecting, leaching, dumping, or disposing of such wastewater to waters or land within the Basin, and including the abandonment or discarding of barrels, containers, and other receptacles containing such wastewater.”

- Also in 18 C.F.R. Part 440, the definition of “Wastewater from HVHF and HVHF-related activities” is modified to make clear that this term encompasses wastewater, brine, or sludge *containing* (as opposed to constituting) the various listed contaminants.

6. Many commenters called for a prohibition on all importation of HVHF wastewater, including transportation across the Basin and storage within it, as well as disposal of HVHF wastewater within the Basin (in their words, a “full ban”). Some have suggested that the Delaware River Basin will be an especially attractive location for the importation and storage of HVHF wastewater under the adopted rules. Why did the Commission not enact a “full ban” on HVHF wastewater importation?

The Commission does not agree that the Delaware River Basin is an attractive location for importation or storage of HVHF wastewater. In the Commission’s view, which is supported by data and set forth in detail at Response R-25 of the CRD adopted by the Commission concurrently with the final rule:

- Wastewater storage and treatment infrastructure is typically located proximate to HVHF activities.
- Data on spills of oil and gas wastewater during truck transport demonstrate that spill events are more frequent in regions with active shale gas production than in adjacent regions where shale gas has been prohibited.
- HVHF has been prohibited within the Basin since February 2021.
- There is a “high bar” for approval of any importation of wastewater into the Delaware River Basin consistent with the policy and evaluation factors included in final sections 2.30.2 and 2.30.3 of the Water Code. The latter include “consideration of the available alternatives to the [proposed] importation” (§ 2.30.3 B.1.).

Because the Commission in 2021 prohibited HVHF in hydrocarbon bearing rock formations in the Basin and has now prohibited discharges of wastewater from HVHF and HVHF-related activities within the Basin, the Commission anticipates that only low volumes of HVHF wastewater will be transported, stored, treated, processed, or reused within the Basin.

The Commission has never approved a proposal to import HVHF wastewater into the Basin and has no pending applications of this kind.

7. Do these rules consider the risks of HVHF wastewater leaks or spills from trucks, pipelines, or storage facilities?

Yes. Such spills, leaks or releases to land or waters of the Basin are explicitly prohibited by the final rule. However, because the Commission has prohibited the use of HVHF within the Basin and is prohibiting the discharge to waters or land within the Basin of HVHF wastewater (broadly defined to include products, co-products, byproducts or waste products from the treatment, processing or modification of HVHF wastewater), the Commission anticipates that only low volumes of HVHF wastewater will be transported, stored, treated, processed, or reused within the Basin and that the amount and severity of any spills, leaks, or other releases and resulting impacts to the Basin's water resources from such activities will likely be sufficiently low so as not to injuriously affect the waters of the Basin as contemplated by the Comprehensive Plan.

The Commission also has determined based on spill data that the probability of spills from HVHF wastewater pipelines (as well as other conveyances) is substantially higher in active shale gas production areas than in areas where shale gas is not produced. The likelihood of spills from such pipelines is expected to remain quite low within the Basin.

Finally, DRBC's authority is limited to water resources of the Delaware River Basin. It has responsibility for protecting these resources and has determined that controlling future pollution by prohibiting discharges of HVHF wastewater to the land or waters of the Basin is required to fulfill that responsibility. The adopted rules do not regulate the transportation and storage of wastewater originating outside of or within the Basin. These activities are regulated by other administrative agencies of the Commission's member states and the United States.

8. Do the adopted rules prohibit the exportation of water to support HVHF outside the Delaware River Basin?

While the adopted rules do not include this specific prohibition, the Commission's final rules on exportation of Basin waters limit exportations from the Basin to instances where the sponsor: 1) demonstrates that the exportation of Basin water is required to serve a straddled or adjacent public water system; 2) demonstrates that the exportation of Basin water is required to meet public health and safety needs on a temporary, short-term, or emergency basis; or 3) is proposing an exportation of wastewater to a straddled or adjacent public wastewater collection system or is proposing to export wastewater for treatment, disposal or both at a waste management facility that has all required state and federal approvals to lawfully receive it. Other classes of exportations are ineligible for Commission review and approval. As the Commission makes explicit in Response R-10 of the CRD, an application for exportation of water to serve HVHF activities will not meet these thresholds.

If the required demonstration is made, the Commission may approve an exportation only after it has evaluated a suite of factors designed to ensure no harm to the Basin's water resources or the health and safety of the Basin community. These factors include: 1) the sponsor's planned use for

the water and any resulting public benefits; 2) the availability to the sponsor of alternatives to the exportation of Basin water; and 3) whether these alternatives have been diligently pursued, including consideration of the sponsor's uses of water outside its service area. As discussed in Response R-7 in the CRD, past practice indicates that sufficient water resources exist outside the Basin to serve HVHF projects where permitted.

9. For projects involving the exportation of Basin water that are subject to review by the Commission, what are all the factors considered in the Commission's review?

As outlined in section 2.30.3 A. of the adopted Water Code amendments, once eligibility for consideration is established under section 2.30.2 C., the Commission will consider 10 factors in evaluating a project that involves an exportation. These are:

1. the effect of the exportation on the health and safety of the Basin community;
2. the effect of the exportation on existing or future water availability or shortages, including, but not limited to, sources within areas designated by the Commission as protected areas pursuant to section 10.2 of the Compact, sources within Delaware River reaches with flows that are frequently augmented by reservoir releases due to low flows, and sources in areas subject to DRBC drought operations or state drought declarations within the past five years;
3. the effect of the exportation on aquatic ecosystems;
4. the effect of the exportation on water quality and waste assimilation;
5. the effect of the exportation on salinity concentrations;
6. the effect of the exportation on the water uses protected by the Comprehensive Plan, DRBC regulations or DRBC docket approvals, or on the ability of DRBC to effectuate the Comprehensive Plan;
7. the effect of the exportation, including its volume, rate, timing and duration, on passby or instream flow requirements contained in DRBC regulations or project approvals;
8. the sponsor's planned use for the water and any resulting public benefits;
9. the availability to the sponsor of alternatives to the exportation of Basin water and whether these alternatives have been diligently pursued, including without limitation a review of the sponsor's uses of water outside the sponsor's service area, if any; conservation measures undertaken by the sponsor or a public water system in the service area where the sponsor is located to forestall the need for a transfer of Basin water; and the results of a water audit (or audits) performed by the sponsor in accordance with section 2.1.8 of the Delaware River Basin Water Code; and
10. whether the exportation would contravene sections 3.3 and 3.5(a) of the Compact by impeding or interfering with the rights, powers, privileges, conditions or obligations

contained in the Supreme Court Decree in *New Jersey v. New York*, 347 U.S. 995 (1954), as modified by the Commission with the unanimous consent of the parties to the Decree.

10. Can “straddled” or “adjacent” public systems sell water for HVHF or HVHF-related activities?

DRBC’s authority is limited to the protection of the water resources of the Delaware River Basin. Under the final amendments, proposed new or expanding exports that meet the review threshold and are eligible for Commission consideration pursuant to section 2.30.2 C. will be evaluated using the ten factors set forth at section 2.30.3 A. The factors include, among others, the effects of the proposed export on the health and safety of the Basin community and on aquatic ecosystems within the Basin, and the availability of alternatives to the exportation.

11. Why are certain exportations of wastewater allowable under the adopted regulations?

Because water and wastewater service areas often straddle basin boundaries, it is not uncommon for wastewater generated in one basin to be disposed of in another. Imports and exports of wastewater occur routinely around the Basin boundary in this manner. Under the adopted rules, exportations that the Commission has previously approved will be permitted to continue. To be eligible for review and approval under the amended regulations, new and expanding exportations that meet the threshold for review set forth in the Commission’s Rules of Practice and Procedure must also satisfy at least one of the threshold eligibility criteria at Water Code section 2.30.2 C.

The purpose of making certain exportations of wastewater eligible for review and approval is to ensure that straddled and adjacent public wastewater collection systems can continue to operate, and if necessary, expand, normally. The provision is not intended to support exportations of wastewater for HVHF. As noted elsewhere in this document, in addition to the eligibility criteria at section 2.30.2 C., the amendments include ten evaluation factors at section 2.30.3 A. that the Commission will apply in evaluating proposed exportations of Basin water, including wastewater, that are eligible for consideration. The factors include, among others, the availability of alternatives to the exportation.

12. Does the final rule regulate air emissions from HVHF activities?

No. This activity is beyond the scope of the proposed or final rule. Refer to the Commission’s CRD (Response R-20) for a more detailed explanation.

13. Does the final rule prohibit the discharge, including by road spreading, of wastewater from conventional drilling activities or conventional wells?

The final rule prohibits the discharge of wastewater meeting the definition of “wastewater from HVHF and HVHF-related activities,” as set forth in 18 C.F.R. 440.2, regardless of whether the well generating the wastewater, the formation targeted by the well, or the drilling activity is labeled “conventional” or “unconventional.”

The Commission's rule thus prohibits the discharge within the Basin of wastewater from a "conventional" well that is stimulated with HVHF techniques. Similarly, if a "conventional" well is stimulated using techniques other than HVHF, but with fracturing fluid comprised in part of treated or untreated wastewater from HVHF or HVHF-related activities, the prohibition applies to the entire discharge. As stated in FAQ 3 above, road spreading of HVHF wastewater is prohibited. The discharge of wastewater that is not generated in whole or in part from HVHF or HVHF-related activities falls outside the scope of the Commission's discharge prohibition. That is, the prohibition does not apply to the discharge of wastewater other than HVHF and HVHF-related wastewater.

The Commission understands that since the December 7, 2022 adoption of these final regulations, some members of the public have sought clarification on whether the final rule prohibits the discharge of wastewater from "conventional wells" that have undergone "High volume hydraulic fracturing (HVHF)," as defined in 18 C.F.R. 440.2, to the Basin's land or waters. In particular, some members of the public have questioned whether in the Commission's efforts to address some of the public's comments on the proposed regulation using terms employed by commenters, it has narrowed the scope of the rule's prohibition on the discharge of HVHF and HVHF-related wastewater to the waters or land within the Basin. The Commission has not done so.

When describing oil and gas drilling operations, target formations, oil and gas wells, and wastewater characteristics, many of those who commented on the proposed rule used the terms "conventional" and "unconventional." These terms are employed within the oil and gas industry and also have been defined by some regulatory authorities, but not by the Commission. In several instances in the Commission's guidance documents issued in conjunction with the final rule, and in a single bullet point in the preamble to its notices of final rule adoption, the Commission used the terms "conventional" and "unconventional," consistent with the language employed by commenters or by the technical and scientific literature that they or the DRBC referenced. In doing so, it did not alter the effect of the rule as written.

The Commission will continue to coordinate with the Basin states to review the scientific evidence regarding harm to water resources caused by road spreading of non-HVHF oil and gas production wastewater and may in the future consider whether additional regulation of the practice is needed in the Basin.

14. Many commenters suggested that the proposed rules would encourage hydraulic fracturing outside of the Delaware River Basin which in turn would adversely impact climate change and prevent the transition to renewable energy. Did the Commission consider these factors?

The Delaware River Basin Compact expressly provides that the Commission "shall have, exercise and discharge its functions, powers and duties within the limits of the basin." However, the Commission does not agree that the rule supports the development of additional high volume hydraulic fracturing outside of the Delaware River Basin.

The Commissioners and DRBC staff share the commenters' concerns about climate change and its impacts on the water cycle, as described in the CRD. The Commission also recognizes the importance of renewable energy sources to any long-term national, regional, or state energy policy; however, the Commission does not set energy policy for the nation, the region, or its member states. In accordance with the authority conferred on the Commission by the Compact, any rules related to high volume hydraulic fracturing and HVHF-related activities are limited to addressing the planning, development, conservation, utilization, management, and control of the water resources of the Basin to meet present and future needs.

15. Was there a moratorium on the exportation of water for hydraulic fracturing or the importation of wastewater from hydraulic fracturing? Aren't these rules taking a step backwards?

No. The Commission's May 5, 2010, Resolution for the Minutes (sometimes referred to as the "de facto moratorium") was silent concerning exports of water to support hydraulic fracturing (HF) or importations of HF wastewater, leaving the then-existing importation and exportation regulations in the Water Code and Rules of Practice and Procedure unchanged.

With respect to exportation, at the request of New York State, the Commission for a time deferred the consideration of any proposed exportations of Basin waters from within New York State to support HVHF until the State Environmental Quality Review (SEQR) process was complete. New York's SEQR process on HVHF was completed in 2015. The Commission has never approved an exportation of water to support HVHF, and no such proposals are currently under review.

Since 2008, many of the Commission's dockets issued for wastewater treatment plant discharges have included a condition prohibiting the docketed facility from accepting HF wastewater for treatment and discharge without the Commission's prior review and approval. To date, no docket holder has applied for or obtained the Commission's approval to treat and discharge HF wastewater. With the adoption of these final rules, the docket restrictions relating to HF wastewater continue and are reinforced by the new prohibition.

16. Are these rules consistent with the Pennsylvania Constitution's Environmental Rights Amendment?

Although the Environmental Rights Amendment to the Pennsylvania Constitution and the Compact have overlapping goals, as a federal-interstate compact agency, the Commission is not bound by, nor is it empowered to carry out, state constitutional provisions. While the Commission believes its regulations are consistent with the Environmental Rights Amendment, the Commission has acted pursuant to the authority granted by the Compact, not pursuant to the Pennsylvania Constitution. The Pennsylvania Supreme Court has affirmed the rights enshrined in the Amendment in cases such as *Pennsylvania Environmental Defense Fund v. Commonwealth*, 161 A. 3d 911 (Pa. 2017); *Robinson Township v. Commonwealth*, 83 A. 3d 901 (Pa. 2013); and *Yaw v. Delaware River Basin Commission*,

No. 21-2315 (3d Cir. 2022). For a more complete response, refer to the Commission's CRD (Response R-75).

17. *Can DRBC enforce these rules?*

Yes. Section 14.17 of the Compact and Article 7 of the Commission's Rules of Practice and Procedure (18 C.F.R. Part 401, Subpart G) provide the Commission with the ability to seek penalties for non-compliance. The Commission will work within its authority and in coordination with the host states in the event of a violation of the rules.