

DELAWARE RIVER BASIN COMMISSION

Statutory Authority: 53 Delaware Laws, Chapter 71, Approved May 26, 1961 (Delaware River Basin Compact) (53 Del.Laws, c. 71); United States Public Law 87-328, approved September 27, 1961, 75 Statutes at Large 688.

FINAL

FINAL RULE

Comprehensive Plan and Special Regulations with Respect to High Volume Hydraulic Fracturing; Rules of Practice and Procedure Regarding Project Review Classifications and Fees

Proposed: *Delaware Register of Regulations* on January 1, 2018 (21 DE Reg. 526-528)

Adopted: February 25, 2021, by the Delaware River Basin Commission, Pamela M. Bush, Esq., Commission Secretary.
Filed: April 27, 2021 as a final regulation.

Effective: May 21, 2021 (30 days from publication of the final rule in the Federal Register, which occurred on April 21, 2021).

Summary: By Resolution No. 2021-01 on February 25, 2021, the Delaware River Basin Commission amended its Comprehensive Plan and adopted new regulations to prohibit high volume hydraulic fracturing in hydrocarbon-bearing rock formations within the Delaware River Basin. The Commission simultaneously adopted unrelated amendments to its rules concerning the classification of projects for review under Section 3.8 of the Compact and regulatory program fees.

Contact: Pamela M. Bush, Esquire, 609-477-7203, pam.bush@drbc.gov.

Supplementary Information: The Delaware River Basin Commission ("DRBC" or "Commission") is a Federal-interstate compact agency charged with managing the water resources of the Delaware River Basin on a regional basis without regard to political boundaries. Its members are the governors of the four basin states-Delaware, New Jersey, New York and Pennsylvania-and the North Atlantic Division Commander of the U.S. Army Corps of Engineers, representing the Federal Government. The Commission is not subject to the requirements of the Delaware Administrative Procedure Act. The purpose of this notice is to advise the public that duly adopted regulations of the Commission have been filed with the state in accordance with Section 14.2 of the Delaware River Basin Compact.

Background. When the potential for developing natural gas from tight shale formations within the Basin using high volume hydraulic fracturing ("HVHF") and horizontal drilling techniques and the risks to water resources posed by such activities became known to the Commission, Commission staff undertook a scientific, technical, regulatory, and policy analysis to determine the appropriate response in light of the Commission's statutory mission and Comprehensive Plan.

An important milestone occurred on September 13, 2017, when the DRBC Commissioners by a Resolution for the Minutes directed the Executive Director to prepare and publish for public comment a revised set of draft regulations, to include, among other things, "prohibitions relating to the production of natural gas utilizing horizontal drilling and hydraulic fracturing within the basin." In accordance with the Commissioners' directive, the Commission proposed amendments to its Comprehensive Plan and to its Special Regulations at 18 CFR part 440, including a prohibition on HVHF within the Basin. The Commission simultaneously proposed amendments to its Administrative Manual-Rules of Practice and Procedure, 18 CFR part 401, concerning the classification of projects for review under Section 3.8 of the Compact (§ 401.35) and regulatory program fees (§ 401.43). See, 21 DE Reg. 526, January 1, 2018. *Also see*, 83 Fed. Reg. 1586, January 12, 2018; 50 N.J.R. 717, February 5, 2018; NYS Register, January 3, 2018 p. 5; and 48 Pa. B. 255, January 13, 2018. Some of the proposed amendments to part 401 were related to the new part 440 and others were not; however, only the changes unrelated to part 440 have been adopted as final rules.

The changes unrelated to HVHF do not substantively alter Commission requirements or fees, but better align the rules with the Commission's practices, eliminate unnecessary language, clarify language that has been misconstrued, and in instances replace the discretion of the Executive Director with that of the Commission. The changes to project review classifications: 1) retain Commission review of alterations to wetlands of less than 25 acres where a state or a federal level review and permit system is not in effect, while eliminating additional triggers for such review; 2) remove the provision for review of regional wastewater treatment plans developed pursuant to the Federal Water Pollution Control Act because the basin states have effective programs for the transparent development and implementation of such plans; 3) replace the discretion of the Executive Director with that of the Commission to require review under Section 3.8 of the Compact of any project having a potential substantial water quality impact on waters classified as Special Protection Waters; and 4) clarify

that the Commission as a whole, not merely any single agency of a signatory party, may determine that a project in an excluded classification is required to be submitted for review under Section 3.8 of the Compact. The changes to regulatory program fees replace the term "docket application fee" with the more accurate term "application fee," because project review does not always involve a "docket."

Extensive opportunity for public input on the proposed rules was provided during the public comment period that took place from November 30, 2017 to March 30, 2018. In addition to accepting written comments, the Commission accepted oral comment at six public hearings, one of which was conducted through an operator-assisted toll-free teleconference to avoid the need for travel to a hearing location. During the comment period, the Commission received a total of 8,903 comment submissions (8,680 in writing and 223 at public hearings). In many cases, a single comment submission included numerous detailed comments. A Comment and Response Document was prepared and adopted by the Commission to address the comments received from the public.

Together with the other materials gathered during the development of its regulation, the Commission reviewed the extensive public comments, including consultant reports, scientific literature and other statements and materials submitted, and examined the experience of other jurisdictions with HVHF. Based upon its review, the Commission by Resolution No. 2021-01 on February 25, 2021, found and determined that:

1. As the scientific and technical literature and the reports, studies, findings and conclusions of other government agencies reviewed by the Commission have documented, and as the more than a decade of experience with high volume hydraulic fracturing in regions outside the Delaware River Basin have evidenced, despite the dissemination of industry best practices and government regulation, high volume hydraulic fracturing and related activities have adversely impacted surface water and groundwater resources, including sources of drinking water, and have harmed aquatic life in some regions where these activities have been performed.

2. The region of the Delaware River Basin underlain by shale formations is comprised largely of rural areas dependent upon groundwater resources; sensitive headwater areas considered to have high water resource values; and areas draining to DRBC Special Protection Waters.

3. The geology of the region in which shale formations potentially containing natural gas are located in the Basin is characterized by extensive geologic faults and fractures providing preferential pathways for migration of fluids (including gases).

4. If commercially recoverable natural gas is present in the Delaware River Basin and if HVHF were to proceed in the Basin, then:

- a. Spills and releases of hydraulic fracturing chemicals, fluids and wastewater would adversely impact surface water and groundwater, and losses of well integrity would result in subsurface fluid (including gas) migration, impairing drinking water resources, and other uses established in the Comprehensive Plan.

- b. The fluids released or migrating would contain pollutants, including salts, metals, radioactive materials, organic compounds, endocrine-disrupting and toxic chemicals, and chemicals for which toxicity has not been determined, impairing the water uses protected by the Comprehensive Plan.

- c. HVHF activities and their impacts would be dispersed over and adversely affect thousands of acres of sensitive water resource features, including, among others, forested groundwater infiltration areas, other groundwater recharge locations, and drainage areas to Special Protection Waters, where few existing roads are designed to safely carry the heavy industrial traffic required to support HVHF, prevent dangerous spills or provide access to remediate spills that occur.

5. For these reasons and other grounds described in the administrative record for this rulemaking:

- a. High-volume hydraulic fracturing and related activities pose significant, immediate and long-term risks to the development, conservation, utilization, management, and preservation of the water resources of the Delaware River Basin and to Special Protection Waters of the Basin, considered by the Commission to have exceptionally high scenic, recreational, ecological, and/or water supply values.

- b. Controlling future pollution by prohibiting high volume hydraulic fracturing in the Basin is required to effectuate the Commission's 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.

The Commission's Comment and Response Document responds to comments regarding the risks to water resources posed by HVHF, and the potential and observed adverse impacts of HVHF and related activities on water resources. In addition, it addresses comments concerning: the Commission's authority; the intersection of Commission, state and Federal rules; the proposed rule text; basis and background documents; economic impacts; the relationship of HVHF and related activities to DRBC's Comprehensive Plan, rules and policies; public health; chemical disclosures; climate change; renewable energy; policies and reports on the Susquehanna River Basin; the public input process; compliance and enforcement; constitutional challenges and other matters.

Changes from the draft rule. Upon adopting its final rules concerning HVHF, the Commission withdrew proposed § 440.4 - Exportation of water for hydraulic fracturing of oil and natural gas wells and § 440.5 - Produced Water (and importation of wastewater), and revised § 440.2 - Definitions to eliminate terms associated solely with the two deleted sections. Within part 401, comprising the Commission's Rules of Practice and Procedure, proposed amendments to § 401.35 - Classification of Projects for Review concerning the importation and exportation of water and wastewater into and from the Basin were withdrawn. Also, within part 401, proposed amendments to § 401.43 - Regulatory Program Fees

related to wastewater treatability studies were withdrawn. The final rules were revised to eliminate all references to the deleted sections, and public comments specific to these sections are not addressed in the Commission's Comment and Response document. The topics of water exportation and wastewater importation will be addressed as appropriate through one or more separate Commission actions.

The Comprehensive Plan amendments and final rules replace the Executive Director Determinations of May 19, 2009, June 14, 2010 and July 23, 2010. The Resolution for the Minutes of May 5, 2010, which postponed the Commission's consideration of well pad projects until the adoption of final rules, expires by its own terms.

Additional materials. Additional materials can be found on the Commission's website, www.drbc.gov, at https://www.state.nj.us/drbc/about/regulations/final-rule_hvhf.html. These include links to Resolution No. 2021-01 of February 25, 2021 adopting the final rule; the Commission's Comment and Response Document; a mark-up comparing the final to the proposed rule text for 18 CFR part 440; and mark-ups comparing the amended to the existing rule text for 18 CFR 401.35 and 401.43. The Commission's notice of proposed rulemaking, proposed rule text, written comments received, and transcripts of public hearings also can be found on the Commission's website at https://www.nj.gov/drbc/meetings/proposed/notice_hydraulic-fracturing.html.

A summary of Commission actions with respect to hydraulic fracturing for oil and gas extraction prior to the Commission's September 13, 2017 directive is available at: <https://www.nj.gov/drbc/programs/natural/archives.html>.

For the reasons set forth in the preamble, the Delaware River Basin Commission amends 18 CFR chapter III as follows:

PART 401 - RULES OF PRACTICE AND PROCEDURE

1. The authority citation for part 401 continues to read as follows:

Authority: Delaware River Basin Compact (75 Stat. 688), unless otherwise noted.

Subpart C - Project Review Under Section 3.8 of the Compact

2. Amend § 401.35 as follows:
 - a. Revise paragraphs (a) introductory text, (a)(2) and (15), and (b)(14) through (17);
 - b. Remove paragraph (b)(18);
 - c. Revise paragraph (c);
 - d. Remove paragraph (d).

The revisions read as follows:

§ 401.35 Classification of projects for review under section 3.8 of the Compact.

(a) Except as the Commission may specially direct by notice to the project owner or sponsor, a project in any of the following classifications will be deemed not to have a substantial effect on the water resources of the Basin and is not required to be submitted under Section 3.8 of the Compact:

* * * * *

(2) A withdrawal from ground water when the daily average gross withdrawal during any 30 consecutive day period does not exceed 100,000 gallons;

* * * * *

(15) Draining, filling, or otherwise altering marshes or wetlands when the area affected is less than 25 acres; provided, however, that areas less than 25 acres shall be subject to Commission review and action where neither a state nor a Federal level review and permit system is in effect;

* * * * *

(b) * * *

(14) Landfills and solid waste disposal facilities affecting the water resources of the Basin;

(15) State and local standards of flood plain regulation;

(16) Electric generating or cogenerating facilities designed to consumptively use in excess of 100,000 gallons per day of water during any 30-day period; and

(17) Any other project that the Commission may specially direct by notice to the project sponsor or land owner as having a potential substantial water quality impact on waters classified as Special Protection Waters.

(c) Regardless of whether expressly excluded from review by paragraph (a) of this section, any project or class of projects that in the view of the Commission could have a substantial effect on the water resources of the basin may, upon special notice to the project sponsor or landowner, be subject to the requirement for review under section 3.8 of the Compact.

3. Amend § 401.43 as follows:

- a. Revise paragraphs (b)(1) introductory text, (b)(1)(iii) introductory text, (b)(2)(i), (b)(4)(iii), and (c); and
- b. In paragraph (e), in table 1, revise the table heading and the heading for the middle column.

The revisions read as follows:

§ 401.43 Regulatory program fees.

* * * *

(b) * * *

(1) *Application fee*. Except as set forth in paragraph (b)(1)(iii) of this section, the application fee shall apply to:

* * * *

(iii) *Exemptions*. The application fee shall not apply to:

* * * *

(2) * * *

(i) Except as provided in paragraph (b)(2)(ii) of this section, an annual monitoring and coordination fee shall apply to each active water allocation or wastewater discharge approval issued pursuant to the Compact and implementing regulations in this part, regardless of whether the approval was issued by the Commission in the form of a docket, permit or other instrument, or by a Signatory Party Agency under the One Permit Program rule (§ 401.42).

* * * *

(4) * * *

(iii) *Modification of a DRBC approval*. Following Commission action on a project, each project revision or modification that the Executive Director deems substantial shall require an additional application fee calculated in accordance with paragraph (e) of this section and subject to an alternative review fee in accordance with paragraph (b)(3) of this section.

* * * *

(c) *Indexed adjustment*. On July 1 of every year, beginning July 1, 2017, all fees established by this section will increase commensurate with any increase in the annual April 12-month Consumer Price Index (CPI) for Philadelphia, published by the U.S. Bureau of Labor Statistics during that year.¹ In any year in which the April 12-month CPI for Philadelphia declines or shows no change, the application fee and annual monitoring and coordination fee will remain unchanged. Following any indexed adjustment made under this paragraph (c), a revised fee schedule will be published in the Federal Register by July 1 and posted on the Commission's website. Interested parties may also obtain the fee schedule by contacting the Commission directly during business hours.

* * * *

(e) * * *

TABLE 1 TO § 401.43 - APPLICATION FEES

* * *	Application fee	* * *

* * * *

4. Add part 440 to read as follows:

PART 440 - HIGH VOLUME HYDRAULIC FRACTURING

Sec.

440.1 Purpose, authority, and relationship to other requirements.

440.2 Definitions.

440.3 High volume hydraulic fracturing (HVHF).

Authority: Delaware River Basin Compact (75 Stat. 688).

§440.1 Purpose, authority, and relationship to other requirements.

(a) *Purpose*. The purpose of this part is to protect and conserve the water resources of the Delaware River Basin. To effectuate this purpose, this section establishes standards, requirements, conditions, and restrictions to prevent or reduce depletion and degradation of surface and groundwater resources and to promote sound practices of water resource management.

(b) *Authority*. This part implements Sections 3.1, 3.2(a), 3.2 (b), 3.6(b), 3.6(h), 4.1, 5.2, 7.1, 13.1 and 14.2(a) of the Delaware River Basin Compact.

(c) *Comprehensive Plan*. The Commission has determined that the provisions of this part are required for the immediate and long range development and use of the water resources of the Basin and are therefore incorporated into the Commission's Comprehensive Plan.

(d) *Relationship to other Commission requirements*. The provisions of this part are in addition to all applicable requirements in other Commission regulations in this chapter, dockets, and permits.

1. Consumer Price Index - U/Series ID: CUURA102SA0 / Not Seasonally Adjusted / Area: Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD / Item: All items / Base Period: 1982-84=100.

(e) *Severability*. The provisions of this part are severable. If any provision of this part or its application to any person or circumstances is held invalid, the invalidity will not affect other provisions or applications of this part, which can be given effect without the invalid provision or application.

(f) *Coordination and avoidance of duplication*. In accordance with and pursuant to section 1.5 of the Delaware River Basin Compact, to the fullest extent it finds feasible and advantageous the Commission may enter into an Administrative Agreement (Agreement) with any Basin state or the Federal Government to coordinate functions and eliminate unnecessary duplication of effort. Such Agreements will be designed to: effectuate intergovernmental cooperation, minimize the efforts and duplication of state and Commission staff resources wherever possible, ensure compliance with Commission-approved requirements, enhance early notification of the general public and other interested parties regarding proposed activities in the Basin, indicate where a host state's requirements satisfy the Commission's regulatory objectives, and clarify the relationship and project review decision making processes of the states and the Commission for projects subject to review by the states under their state authorities and by the Commission under Section 3.8 and Articles 6, 7, 10 and 11 of the Compact.

§440.2 Definitions.

For purposes of this part, the following terms and phrases have the meanings provided. Some definitions differ from those provided in regulations of one or more agencies of the Commission's member states and the Federal Government.

Basin is the area of drainage into the Delaware River and its tributaries, including Delaware Bay.

Commission is the Delaware River Basin Commission (DRBC) created and constituted by the Delaware River Basin Compact.

Fracturing fluid(s) is a mixture of water (whether fresh or recycled) and/or other fluids and chemicals or other additives, which are injected into the subsurface and which may include chemicals used to reduce friction, minimize biofouling of fractures, prevent corrosion of metal pipes or remove drilling mud damage within a wellbore area, and propping agents such as silica sand, which are deposited in the induced fractures.

High volume hydraulic fracturing (HVHF) is hydraulic fracturing using a combined total of 300,000 or more gallons of water during all stages in a well completion, whether the well is vertical or directional, including horizontal, and whether the water is fresh or recycled and regardless of the chemicals or other additives mixed with the water.

Hydraulic fracturing is a technique used to stimulate the production of oil and natural gas from a well by injecting fracturing fluids down the wellbore under pressure to create and maintain induced fractures in the hydrocarbon-bearing rock of the target geologic formation.

Person is any natural person, corporation, partnership, association, company, trust, Federal, state, or local governmental unit, agency, or authority, or other entity, public or private.

Water resource(s) is water and related natural resources in, on, under, or above the ground, including related uses of land, which are subject to beneficial use, ownership, or control within the hydrologic boundary of the Delaware River Basin.

§440.3 High volume hydraulic fracturing (HVHF).

(a) *Determination*. The Commission has determined that high volume hydraulic fracturing poses significant, immediate and long-term risks to the development, conservation, utilization, management, and preservation of the water resources of the Delaware River Basin and to Special Protection Waters of the Basin, considered by the Commission to have exceptionally high scenic, recreational, ecological, and/or water supply values. Controlling future pollution by prohibiting such activity in 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.

(b) *Prohibition*. High volume hydraulic fracturing in hydrocarbon bearing rock formations is prohibited within the Delaware River Basin.

Dated: April 27, 2021.

Pamela M. Bush, Esq.

Commission Secretary and Assistant General Counsel

24 DE Reg. 1054 (06/01/21) (Final)