

NO. 2021-01

A RESOLUTION to amend the Comprehensive Plan and adopt implementing regulations with respect to high volume hydraulic fracturing and to finalize amendments to the *Administrative Manual – Rules of Practice and Procedure* concerning project review classifications and fees.

WHEREAS, at the business meeting of the Delaware River Basin Commission (“DRBC” or “Commission”) on [May 5, 2010, the DRBC Commissioners unanimously directed DRBC staff “to develop draft regulations on well pads in the shales for notice and comment rulemaking;”](#) and

WHEREAS, the Commission on December 9, 2010 [published draft regulations](#) concerning natural gas development on which it subsequently received nearly 69,000 comments, and on November 8, 2011 the Commission published revised draft natural gas development regulations; and

WHEREAS, the Minutes for DRBC’s business meetings of March, May and July of 2012 record that the Commissioners and members of their technical staffs continued to consult with one another and work in good faith toward consensus on technical aspects of the Commission’s natural gas development regulations; and

WHEREAS, in December 2013, DRBC Alternate Commissioner Angus Eaton of the New York Department of Environmental Conservation (“Department” or “NYSDEC”) on behalf of Commission Chair *pro tem* Governor Andrew Cuomo of the State of New York reported that the Commission would rely on the results, when published, of studies that had been initiated by state and federal agencies for guidance in setting minimum standards for natural gas development in the Basin; and

WHEREAS, in [June 2015, the NYSDEC issued its Final Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program \(“FSGEIS”\)](#), which concluded that, “[e]ven with the implementation of an extensive suite of mitigation measures considered by the Department . . . , the significant adverse public health and environmental impacts from allowing high-volume hydraulic fracturing to proceed under any scenario cannot be adequately avoided or minimized to the maximum extent practicable in accordance with [the State Environmental Quality Review Act];” and

WHEREAS, in [December 2016, the U.S. Environmental Protection Agency \(“U.S. EPA”\) published its report entitled, Hydraulic Fracturing for Oil and Gas: Impacts From the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States](#), which concluded that “the uses of water in hydraulic fracturing, from water withdrawals . . . through mixing and injection . . . to the collection and disposal or reuse of produced water . . . can impact drinking water resources under some circumstances;” and that such impacts “can range in frequency and severity, depending on the combination of hydraulic fracturing water cycle activities and local- or regional-scale factors;” and

WHEREAS, in March of 2017, DRBC Alternate Commissioner LTC Michael A. Bliss of the United States Army Corps of Engineers, Philadelphia District, acting on behalf of Commission Chair *pro tem* Maj. Gen. William H. Graham for the United States, announced that the Commissioners continued to confer in good faith on a path forward for adoption of rules regarding natural gas development and hydraulic fracturing in the Basin; the Commission at that time had no plans to vote on the draft rules

published in 2011; and any new or continued rulemaking by the Commission would be subject to further public notice and comment; and

WHEREAS, by [Resolution for the Minutes on September 13, 2017](#), noting that the combination of hydraulic fracturing with horizontal drilling and related activities for natural gas extraction presents risks, vulnerabilities and impacts to surface and ground water resources in the Delaware River Basin (“Basin”), the Commission directed the Executive Director to publish no later than November 30 of that year a set of revised draft regulations regarding certain natural gas development activities in the Basin; and

WHEREAS, on November 30, 2017 the Commission issued a [Notice of Proposed Rulemaking](#), FAQs, proposed rule text, and technical guidance to:

- amend its Special Regulations by the addition of a part on hydraulic fracturing, including: the prohibition of high volume hydraulic fracturing (“HVHF”) in shale and other tight formations within the Basin, and conditions relating to water use for hydraulic fracturing and the management of hydraulic fracturing wastewater;
- amend its *Administrative Manual – Rules of Practice and Procedure* (“RPP”) by the addition of project review classifications and fees related to the management of water for and produced water from hydraulic fracturing of hydrocarbon bearing rock formations; and
- amend the RPP by revising certain project review classifications unrelated to hydraulic fracturing; and

WHEREAS, prior to [the close of the comment period on March 30, 2018](#), six public hearings on the draft rules were held – two in Waymart, Pennsylvania in January 2018; two in Philadelphia, Pennsylvania the same month; one in February 2018 in Schnecksville, Pennsylvania, and another, telephonically, on March 6, 2018; and

WHEREAS, during the comment period, the Commission heard oral comment on the draft rules from approximately 223 individuals and received 8,679 written submissions, many of which included multiple comments. [Transcripts from each of the public hearings](#) and [copies of all the written comments](#) were posted on the DRBC website on April 10, 2018; and

WHEREAS, in the course of carefully reviewing the comments submitted on the draft rules, the Commission also has considered the large body of scientific research published since NYSDEC issued its FSGEIS in June 2015 and the U.S. EPA released its final report on the impacts of the hydraulic fracturing water cycle on drinking water in December 2016, largely confirming and expanding upon the findings of those reports and supporting the conclusion that HVHF poses immediate and long-term risks to water resources, human health and aquatic life in the Delaware River Basin; and

WHEREAS, in developing the revised rules, the Commission has considered its Comprehensive Plan, which among other things contains:

- a. provisions codified in the [Commission's Water Code](#), 18 C.F.R. Part 410, protecting the uses of groundwater for domestic, agricultural, industrial and public water supplies and as a source of surface water suitable for recreation, wildlife, fish and other aquatic life (Water Code § 3.40.3 A.), and authorizing the Commission to establish requirements, conditions, or prohibitions which in its judgment are necessary to protect ground water quality (Water Code § 3.40.5 B.3.). *See also*, Water Code provisions:
- § 2.20.5, protecting recharge areas and prohibiting pollution of underground waters and surface waters replenishing underground waters;
 - § 3.40.4 A., protecting groundwater from the introduction of substances in concentrations that are toxic or harmful to human, animal, plant or aquatic life or that exceed federal drinking water standards;
 - § 3.40.4 B., prohibiting degradation of groundwater quality including any degradation that may be injurious to any designated present or future ground or surface water use;
 - § 3.40.5 B.1., prohibiting any person from permitting substances in harmful or toxic concentrations to become groundwater; and
 - § 3.40.5 A., requiring persons to conduct their activities in compliance with Commission regulations so as to prevent requirements of Water Code § 3.40 (relating to groundwater) from being violated; and
- b. provisions codified in the Water Code protecting the quality of the Basin's surface waters, including for example:
- § 3.10.2 B., providing that uses to be protected in all surface waters of the Basin include, among others, public water supplies (except where natural salinity precludes such use) and aquatic life;
 - §§ 3.20.2 through 3.20.6, protecting interstate, non-tidal surface waters for, among other uses, public water supply and maintenance and propagation of aquatic life; and
 - § 3.10.3 A.2., protecting waters classified by the Commission as Special Protection Waters by establishing for such waters a management objective of "no measurable change . . . except toward natural conditions."; and

WHEREAS, the Commission staff, in consultation with the Commissioners and their technical and policy advisors, has developed a detailed response to comments and set of revised rules responsive to the comments received; now therefore,

BE IT RESOLVED by the Delaware River Basin Commission:

A. The Commission hereby finds and determines 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 high volume hydraulic fracturing (“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 the foregoing 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.

- B. The Commission hereby withdraws from further consideration the draft natural gas development regulations it published on November 8, 2011; and
1. Adopts the [February 25, 2021 Comment and Response Document](#) in its entirety.
 2. Adopts the revised rules attached hereto as its final rules and incorporates 18 CFR Part 440 into the Comprehensive Plan. The final rules at 18 CFR Part 440.3 provide that high volume hydraulic fracturing in hydrocarbon-bearing rock formations is prohibited within the Delaware River Basin.
 3. Underscores that the final rules include the following noteworthy changes from those [proposed on November 30, 2017](#):
 - a. Within final Part 440 - High Volume Hydraulic Fracturing, of Title 18 of the Code of Federal Regulations ("CFR"), proposed sections 440.4 – Exportation of water for hydraulic fracturing and 440.5 – Produced water have been removed in their entirety, and section 440.2 – Definitions has been revised to eliminate terms associated solely with the two deleted sections.
 - b. Within Part 401 of Title 18 of the CFR, comprising the Commission's Rules of Practice and Procedure, proposed amendments to section 401.35 – Classification of Projects for Review concerning the importation and exportation of water and wastewater into and from the Basin have been withdrawn.
 - c. Also, within Part 401, proposed amendments to section 401.43 – Regulatory Program Fees related to wastewater treatability studies have been withdrawn.
- C. The Comprehensive Plan amendments and final rules adopted today 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.
- D. The Commission's regulations concerning the exportation from and importation into the Basin of water and wastewater to support hydraulic fracturing will be addressed through one or more separate Commission actions, including if appropriate a separate rulemaking.

BY THE COMMISSION

ADOPTED: February 25, 2021

The final amendments to existing 18 C.F.R. § 401.35 are as follows:

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

(a) Except as the ~~Executive Director-Commission~~ may specially direct by notice to the project owner or sponsor, ~~or as a state or federal agency may refer under paragraph (c) of this section,~~ 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 ~~for any purpose~~ 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; ~~z~~ however, that areas less than 25 acres shall be subject to Commission review and action ~~(i)~~ where neither a state nor a federal level review and permit system is in effect; ~~requiring action by the Commission, or (ii) when a Commissioner or the Executive Director determines that the final action of a state or federal permitting agency may not adequately reflect the Commission's policy as to wetlands of the Basin. In the case of a project affecting less than 25 acres for which there has been issued a state or federal permit, a determination to undertake review and action by the Commission shall be made no later than 30 days following notification of the Commission of such permit action. The Executive Director, with the approval of the Chairman, may at any time within the 30-day period inform any permit holder, signatory party or other interested party that the Commission will decline to undertake review and action concerning any such project;~~

* * * * *

(b) All other projects which have or may have a substantial effect on the water resources of the Basin shall be submitted to the Commission in accordance with these regulations for determination as to whether the project impairs or conflicts with the Comprehensive Plan. Among these are projects involving the following (except as provided in paragraph ~~A-(a)~~ of this section):

* * * * *

~~(14) Regional wastewater treatment plans developed pursuant to the Federal Water Pollution Control Act;~~

~~(145)~~ Landfills and solid waste disposal facilities affecting the water resources of the basin;

~~(156)~~ State and local standards of flood plain regulation;

(167) 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

(178) Any other project that the ~~Executive Director~~ Commission may especially 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. Whenever a state or federal agency determines that a project falling within an excluded classification (as defined in paragraph (a) of this section) may have a substantial effect on the water resources of the Basin, such project may be referred by the state or federal agency to the Commission for action under these Rules.
- ~~(d) Except as otherwise provided by § 401.39 the sponsor shall submit an application for review and approval of a project included under paragraph B. above through the appropriate agency of a signatory party. Such agency will transmit the application or a summary thereof to the Executive Director, pursuant to Administrative Agreement, together with available supporting materials filed in accordance with the practice of the agency of the signatory party.~~

The final amendments to existing 18 C.F.R. § 401.43 are as follows:

§ 401.43 Regulatory program fees.

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(b) * * *

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

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

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(2) *Annual monitoring and coordination fee*.

(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, 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). ~~The fee shall be based on the amount of a project's approved monthly water allocation and/or approved daily discharge capacity.~~

* * * * *

(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 ~~docket~~ 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 ~~docket~~ 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.

¹ Consumer Price Index – U / Series ID: CWURA102SA0 / Not Seasonally Adjusted / Area: Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD / Item: All items / Base Period: 1982-84=100.

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(e) * * *

TABLE 1 TO § 401.43 – ~~DOCKET~~ APPLICATION ~~FILING~~ FEES

Project Type	Docket Application Fee	Fee Maximum
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The final text of new Part 440 is as follows:

SUBCHAPTER B – SPECIAL REGULATIONS

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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

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, dockets and permits.
- (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 - the area of drainage into the Delaware River and its tributaries, including Delaware Bay.

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

Fracturing fluid(s) - 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) - 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 - 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 - 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) - 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.