



Hydraulic Fracturing and the National Environmental Policy Act (NEPA): Selected Issues

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Summary

Hydraulic fracturing is a technique used to recover oil and natural gas from underground low permeability rock formations. This process involves pumping fluids under high pressure into the formations to crack them, releasing oil and gas into the well. The technique has been the subject of controversy due to some of its potential effects on the environment.

The National Environmental Policy Act (NEPA) requires federal agencies to consider the potential environmental consequences of the actions they propose to take by preparing one of three NEPA documents. Actions that fit within a categorical exclusion (CE) undergo a relatively low level of review because these are actions that an agency has found do not have a significant effect on the environment. A CE may not be used when extraordinary circumstances occur. An environmental assessment (EA) provides a more comprehensive level of review and may be prepared when an agency wishes to determine whether an action requires the preparation of an environmental impact statement (EIS). An EIS is the most comprehensive NEPA document; it requires, among other things, that the agency explain how the proposed action will affect the environment; what unavoidable adverse effects will result; and what alternatives to the proposed action exist.

This report provides an overview of two situations in which agencies are arguing that they do not need to conduct a comprehensive environmental review of hydraulic fracturing under NEPA. On March 21, 2012, the U.S. Department of Agriculture Rural Development agency reaffirmed its use of a CE to exempt from further NEPA review the loans it makes for the purchase of single-family homes on properties leased for drilling. The agency stated that, by itself, the existence of a drilling lease on a property is not an extraordinary circumstance that will prevent the agency from using a CE for a loan.

The Delaware River Basin Commission (DRBC) has argued that it does not have to prepare a NEPA document for its approval of regulations that will allow hydraulic fracturing to occur in the Delaware River Basin. On May 31, 2011, New York Attorney General Eric Schneiderman filed a complaint on behalf of the state of New York alleging that the five federal agencies that participated in the DRBC's development of the regulations were in violation of NEPA. On November 22, 2011, the complaint was amended to add the DRBC and its executive director as defendants. New York seeks an injunction compelling the defendants to prepare an EIS before adopting regulations that will allow natural gas development. Although an answer has not been filed in the case, the defendants have argued that approval of the regulations is not a federal action requiring the preparation of a NEPA document because the DRBC is not a federal agency. They have also argued that just because a federal officer sits on the five-member commission, that does not make the DRBC's development of the regulations a federal action.

For more information on NEPA, see CRS Report RS20621, *Overview of National Environmental Policy Act (NEPA) Requirements*, by Kristina Alexander.

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Introduction

Hydraulic fracturing is a technique used to recover oil and natural gas from underground low permeability rock formations.¹ Hydraulic fracturing involves pumping fluids (primarily water and a small portion of chemicals, along with sand or other proppant) under high pressure into rock formations to crack them and allow the resources inside to flow to a production well.² The technique has been the subject of controversy because of the potential effects that hydraulic fracturing and related oil and gas production activities may have on the environment and health.

The National Environmental Policy Act (NEPA) requires federal agencies to consider the potential environmental consequences of the actions they propose to take but does not compel agencies to choose a particular course of action.³ Under NEPA and its implementing regulations issued by the Council on Environmental Quality (CEQ), actions taken by a federal agency may fall into one of three categories for the purposes of environmental review. Actions that fit within a categorical exclusion (CE) undergo a relatively low level of review because these are actions that an agency has found do not have a significant effect on the environment.⁴ An environmental assessment (EA) provides a more comprehensive level of review and may be prepared when an agency wishes to determine whether an action requires the preparation of an environmental impact statement (EIS).⁵ An EIS is the most comprehensive NEPA document; it requires, among other things, that the agency explain how the proposed action will affect the environment; what unavoidable adverse environmental effects will result; and what alternatives to the proposed action exist.⁶

This report provides an overview of two situations in which agencies are arguing that they do not need to conduct a comprehensive environmental review of hydraulic fracturing under NEPA for their proposed actions. On March 21, 2012, the U.S. Department of Agriculture Rural Development agency reaffirmed its use of a CE to exempt from further NEPA review loans it makes for the purchase of single-family homes, even if the properties to be mortgaged have been leased for drilling.⁷ The agency stated that the existence of a gas lease on a property by itself is not an extraordinary circumstance that would prevent the use of a CE under the agency's NEPA guidelines.⁸

The Delaware River Basin Commission (DRBC) has argued that it does not have to prepare a NEPA document for its approval of regulations that will allow hydraulic fracturing to occur in the Delaware River Basin. In a lawsuit, the state of New York alleges that the five federal agencies

¹ DEP'T OF ENERGY, MODERN SHALE GAS DEVELOPMENT IN THE UNITED STATES: A PRIMER, ES-4 (2009), *available at* http://www.netl.doe.gov/technologies/oil-gas/publications/epreports/shale_gas_primer_2009.pdf.

² *Id.* Hydraulic fracturing often is referred to as “fracing” within the industry and as “fracking” by others.

³ *See* 42 U.S.C. §4332.

⁴ *See* 40 C.F.R. §§1500.4(p), 1500.5(k); *see also* COUNCIL ON ENVTL. QUALITY, ESTABLISHING, APPLYING, AND REVISING CATEGORICAL EXCLUSIONS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 3 (2010), *available at* http://ceq.hss.doe.gov/ceq_regulations/NEPA_CE_Guidance_Nov232010.pdf.

⁵ 40 C.F.R. §§1501.4, 1508.9.

⁶ 42 U.S.C. §4332.

⁷ U.S. Department of Agriculture (USDA), Rural Development Administrative Notice No. 4632 (1940-G), NEPA Compliance for Rural Development Single Family Housing Loan Programs (2012), *available at* <http://www.rurdev.usda.gov/SupportDocuments/an4632.pdf>.

⁸ *Id.*

and their officers that participated in the development of the DRBC's regulations have violated NEPA.⁹ On November 22, 2011, the complaint was amended to add the DRBC and its executive director as defendants.¹⁰ The amended complaint seeks an injunction compelling the defendants to prepare an EIS "before proceeding to adopt federal regulations to be administered by DRBC that would authorize natural gas development within the Delaware River Basin."¹¹ Although an answer has not been filed in the case, the defendants have argued that the DRBC is not a federal agency.¹² They have also argued that approving DRBC regulations is not a federal action requiring the preparation of a NEPA document.¹³

USDA Rural Development Agency: Mortgages on Properties with Drilling Leases

As part of its housing program, the U.S. Department of Agriculture (USDA) Rural Development agency lends money to qualifying borrowers for the purchase of single-family homes.¹⁴ Some of these homes are located on properties where hydraulic fracturing may occur because the mineral rights have been leased to oil and gas companies for drilling. Rural Development has issued an administrative notice stating that the existence of drilling leases on a property will not prevent the agency from using a categorical exclusion (CE) to exempt these loans from further NEPA review, at least in ordinary circumstances.¹⁵

CEQ regulations define a "categorical exclusion" as "a category of actions which do not individually or cumulatively have a significant effect on the human environment.... Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect."¹⁶

The guidelines that govern Rural Development's compliance with NEPA are found in its environmental program in RD Instruction 1940-G.¹⁷ In this guidance, the agency has provided a list of CEs that it may use to exempt an agency action from more detailed NEPA review.¹⁸ This list contains actions that the agency has concluded do not "have a significant impact on the

⁹ Initial Complaint at ¶¶ 1, 95, *New York v. U.S. Army Corps of Eng'rs*, No. 11-2599 (E.D.N.Y. May 31, 2011).

¹⁰ Amended Complaint at ¶ 1, *New York v. U.S. Army Corps of Eng'rs*, No. 11-2599 (E.D.N.Y. Nov. 22, 2011).

¹¹ Amended Complaint at ¶ 1 (abbreviations omitted). According to the complaint, if the DRBC approves the regulations, "between 15,000 and 18,000 natural gas wells" will be developed within the Delaware River Basin using high-volume hydraulic fracturing. *Id.* at ¶ 4.

¹² Letter from Brigadier General Peter DeLuca to New York Attorney General Eric Schneiderman (May 24, 2011). A copy is available from the author.

¹³ *Id.*

¹⁴ USDA, Rural Development Housing & Community Facilities Programs, *available at* http://www.rurdev.usda.gov/rhs/common/program_info.htm.

¹⁵ USDA, Rural Development Administrative Notice No. 4632 (1940-G), NEPA Compliance for Rural Development Single Family Housing Loan Programs (2012), *available at* <http://www.rurdev.usda.gov/SupportDocuments/an4632.pdf>.

¹⁶ 40 C.F.R. §1508.4.

¹⁷ RD Instruction 1940-G, *available at* <http://www.rurdev.usda.gov/SupportDocuments/1940g.pdf>; *see also* 7 C.F.R. pt. 1940-G; Revision of Policies and Procedures for Considering the Environmental Impacts of Proposed Agency Actions, 53 Fed. Reg. 36,237 (Sept. 19, 1988).

¹⁸ RD Instruction 1940-G §310.

quality of the human environment, either individually or cumulatively,” and thus do not require the preparation of an EIS or EA.¹⁹ Among the actions that may be excluded is the “provision of financial assistance for the purchase of a single family dwelling or a multi-family project serving no more than four families, i.e. units.”²⁰

As required by CEQ regulations, Rural Development has also promulgated a list of extraordinary circumstances in which an action that would otherwise qualify for a CE may have to undergo further NEPA review because the action may have a significant environmental effect.²¹ These circumstances may be present when actions “would be located within, or in other cases, potentially affect” certain wetlands; wild or scenic rivers; critical habitats or endangered/threatened species; sole source aquifer recharge areas; and state water quality standards, among other natural or historical resources.²² Rural Development uses Form RD 1940-22 when it documents its use of a CE.²³ The form provides a checklist with a column of land uses and environmental resources on the left side. The preparer must indicate whether each of these uses or resources is “present within the site(s) of the proposed action,” within the action’s “area of environmental impact,” or is “affected by the proposed action.”²⁴ Completion of the checklist determines whether extraordinary circumstances exist, and thus whether a CE may be used. At the bottom of the form, the preparer must certify that

[t]his proposal meets, in terms of its size and components, the criteria for a categorical exclusion as defined in Section 1940.310 and 1940.317. As indicated in [the checklist above], the proposal does not affect any important land uses or environmental resources that would subject it to disqualification as a categorical exclusion. Finally, the proposal is neither a phase nor segment of a project which when viewed in its entirety would not meet the requirements of a categorical exclusion per Section 1940.317 (d).²⁵

On March 18, 2012, a news article appeared suggesting that Rural Development was reconsidering the use of a CE for loans made for the purchase of homes on properties leased for drilling.²⁶ The article stated that the agency might subject these loans to more detailed NEPA environmental review in part because of the potential environmental impact of hydraulic fracturing on properties with drilling leases.²⁷ However, on March 21, 2012, Rural Development issued an administrative notice stating that it would continue to use a CE for the provision of “financial assistance for the purchase of a single family dwelling” on properties with drilling leases.²⁸ The notice stated that “[t]he presence of gas leases on a property alone does not

¹⁹ RD Instruction 1940-G §310(a).

²⁰ *Id.* §310(b)(1).

²¹ *Id.* §317(a); *see also* 40 C.F.R. §1508.4.

²² RD Instruction 1940-G §§310, 317(e). Other resources on the list include floodplains; wilderness; historical and archaeological sites; coastal barriers; natural landmarks; important farmlands; prime forest lands; prime rangelands; and approved coastal zone management areas.

²³ Form RD 1940-22, available at <http://www.rurdev.usda.gov/de/1940-22.pdf>; *see also* RD Instruction 1940-G §317(b)-(c).

²⁴ Form RD 1940-22.

²⁵ *Id.*

²⁶ Ian Urbina, *Mortgages for Drilling Properties May Face Hurdle*, N.Y. TIMES, Mar. 18, 2012, available at <http://www.nytimes.com/2012/03/19/us/drilling-property-mortgages-may-get-closer-look-from-agriculture-dept.html?pagewanted=all>.

²⁷ *Id.*

²⁸ USDA, Rural Development Administrative Notice No. 4632 (1940-G), NEPA Compliance for Rural Development (continued...)

constitute any of the special circumstances listed in [RD Instruction 1940.310, which refers to 1940.317,] or the policy considerations contained in RD Instructions 1940.303 through 1940.305.”²⁹ In other words, according to Rural Development, loans made to facilitate the purchase of homes on properties leased for drilling may continue to fit within a CE. Additionally, it appears that the agency does not consider the existence of drilling leases on a property alone to implicate any of the extraordinary circumstances that would prevent the use of a CE as listed in Sections 310 or 317 of the agency’s environmental program.

Delaware River Basin Commission: Proposed Regulations on Natural Gas Development

On May 31, 2011, New York Attorney General Eric Schneiderman brought a federal lawsuit on behalf of the state of New York alleging that five federal agencies and their officers were in violation of NEPA.³⁰ On November 22, 2011, the complaint was amended to add the Delaware River Basin Commission (DRBC) and its executive director as defendants.³¹ The amended complaint asks the court to compel the defendants to prepare an EIS “before proceeding to adopt federal regulations to be administered by DRBC that would authorize natural gas development within the Delaware River Basin.”³² New York alleges that the refusal of the five federal agencies that are represented by the DRBC’s federal member³³ “to comply with NEPA and prepare a draft EIS is not in accordance with law and is arbitrary, capricious, and an abuse of discretion” under the Administrative Procedure Act (APA).³⁴ Because it appears that the Delaware River Basin Compact exempts the DRBC from compliance with the APA,³⁵ New York has argued that the DRBC’s refusal to prepare an EIS is subject to judicial review under the compact itself.³⁶

The Delaware River Basin Compact is an agreement among the federal government, Delaware, New Jersey, New York, and Pennsylvania.³⁷ The compact creates the DRBC and grants it certain

(...continued)

Single Family Housing Loan Programs (2012), *available at* <http://www.rurdev.usda.gov/SupportDocuments/an4632.pdf>.

²⁹ *Id.* The notice also states that “[n]ormal security and appraisal requirements under RD Instruction 1980-D and RD Handbook 3550 continue to apply for these properties.” *Id.*

³⁰ Initial Complaint at ¶¶ 1, 95, *New York v. U.S. Army Corps of Eng’rs*, No. 11-2599 (E.D.N.Y. May 31, 2011).

³¹ Amended Complaint at ¶ 1, *New York v. U.S. Army Corps of Eng’rs*, No. 11-2599 (E.D.N.Y. Nov. 22, 2011).

³² Amended Complaint at ¶ 1 (abbreviations omitted). According to the complaint, if the DRBC approves the regulations, “between 15,000 and 18,000 natural gas wells” will be developed within the Delaware River Basin using high-volume hydraulic fracturing. *Id.* at ¶ 4.

³³ These agencies are the Army Corps of Engineers, Fish and Wildlife Service, National Park Service, Department of the Interior, and Environmental Protection Agency.

³⁴ *Id.* at ¶ 106; *see also* 5 U.S.C. §706(2)(A). NEPA does not contain a private right of action.

³⁵ *See* Delaware River Basin Compact, P.L. 87-328, §15.1(m), 75 Stat. 688, 715 (1961) (“For purposes of ... the Act of June 11, 1946, 60 Stat. 237, as amended ... the Commission shall not be considered a Federal agency.”).

³⁶ Amended Complaint at ¶¶ 11, 115; *see also* Delaware River Basin Compact, §3.3(c), 75 Stat. 688, 693 (“Any other action of the commission pursuant to this section shall be subject to judicial review in any court of competent jurisdiction.”).

³⁷ Delaware River Basin Compact, 75 Stat. at 689. The text of the compact is contained in the federal law approving the compact.

powers to manage the water resources of the basin.³⁸ The commission's membership is composed of five voting members: one member from each of the four states and one representative of the federal agencies.³⁹ The federal member of the DRBC is appointed by the President of the United States and serves "at the pleasure of the President."⁴⁰

NEPA states, "The Congress authorizes and directs that, to the fullest extent possible: ... all agencies of the Federal Government shall ... include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment" an EIS.⁴¹ Under CEQ regulations, *federal agency* refers, in relevant part, to "all agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office."⁴² The regulations define a *major Federal action* as one that has "effects that may be major and which are potentially subject to Federal control and responsibility."⁴³ The regulations list typical categories for federal actions that include the approval of "specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities."⁴⁴

New York alleges that the approval of the DRBC regulations is a major federal action requiring at least one of the defendants to prepare an EIS.⁴⁵ The state alleges that the DRBC is a federal agency for purposes of NEPA for several reasons. These include that the language in the compact suggests that the DRBC is a federal agency;⁴⁶ DRBC rules have been published in the Code of Federal Regulations;⁴⁷ and the CEQ allegedly considers the DRBC to be a federal agency for purposes of NEPA.⁴⁸ The complaint states that the approval of the DRBC regulations amounts to a federal action requiring an EIS for two reasons. First, the complaint maintains that it is a federal action because it is a project approved by the DRBC, which New York asserts is a federal agency for purposes of NEPA.⁴⁹ Additionally, the complaint alleges that approval of the regulations is a federal action because federal agencies "play a significant role in conducting, approving, and implementing the Action."⁵⁰ The complaint argues that under CEQ regulations, when multiple federal agencies have authority over a major federal action that significantly affects the

³⁸ Delaware River Basin Compact §§1.3(c), (e); 2.1; 3.1.

³⁹ *Id.* §§2.1, 2.2, 2.5.

⁴⁰ *Id.* §15.1(d).

⁴¹ 42 U.S.C. §4332.

⁴² 40 C.F.R. §1508.12.

⁴³ *Id.* §1508.18.

⁴⁴ *Id.*

⁴⁵ Amended Complaint at ¶¶ 37, 95, 99-100, 109-11.

⁴⁶ "Neither the Compact nor this Act shall be deemed to enlarge the authority of *any Federal agency other than the Commission* to participate in or to provide funds for projects or activities in the Delaware River Basin." Delaware River Basin Compact §15.1(o) (emphasis added); *see also* Amended Complaint at ¶ 29. As the complaint acknowledges, the compact states that the DRBC is *not* a federal agency for purposes of certain statutes. Amended Complaint at ¶ 29. These include the Federal Tort Claims Act, the Tucker Act, and the Administrative Procedure Act. Delaware River Basin Compact §15.1(m).

⁴⁷ Amended Complaint at ¶ 29.

⁴⁸ Amended Complaint at ¶ 30.

⁴⁹ Amended Complaint at ¶ 95; *see also* 40 C.F.R. §1508.18.

⁵⁰ Amended Complaint at ¶ 96.

environment, at least one of the agencies must prepare an EIS for the action.⁵¹ New York claims NEPA is violated because the five federal agencies and the DRBC have not prepared an EIS.⁵²

Defendants have argued that NEPA does not apply because the DRBC is not a federal agency: “the DRBC itself is not a federal agency subject to NEPA, and the mere participation of a federal officer in the DRBC regulatory process does not constitute a federal action. We therefore believe that the federal commissioner is neither required to produce, nor has the statutory authority to perform, a study under NEPA as part of this process.”⁵³

New York’s amended complaint notes that, in the 1970s, the DRBC complied with NEPA by publishing procedures implementing the statute in the *Federal Register*.⁵⁴ In 1980, the DRBC stated that it would no longer prepare NEPA documents for projects in the basin, citing a lack of funding.⁵⁵ The agency deleted its NEPA procedures in 1997.⁵⁶

As of the date of this report, it does not appear that an answer has been filed in the case. In August 2011, the American Petroleum Institute, Independent Petroleum Association of America, and US Oil & Gas Association moved to intervene in the case in support of the defendants. The oil and gas associations are arguing that they have an interest in the case because they hold permits and leases that would allow them to drill in the basin if the regulations are approved.⁵⁷ According to the docket, in May 2012 the parties are scheduled to file dispositive motions with the court and to set a date for oral argument.⁵⁸

Conclusion

Hydraulic fracturing has been controversial for its potential effects on the environment. NEPA requires federal agencies to consider the environmental consequences of the actions they propose to take by preparing a NEPA document. In at least two situations, agencies have argued that they do not have to prepare an EA or EIS because one of NEPA’s threshold requirements is not satisfied. The USDA Rural Development agency has stated that it will continue to use a CE to exempt its home loans from further NEPA review, even if they are made for the purchase of homes on properties leased for drilling. The agency does not consider gas leases on properties by themselves to be extraordinary circumstances requiring further environmental review.

⁵¹ Amended Complaint at ¶ 37; *see also* 40 C.F.R. §§1501.5, 1501.6, 1508.5, 1508.15, 1508.16.

⁵² Amended Complaint at ¶¶ 101-07, 111-15.

⁵³ Letter from Brigadier General Peter DeLuca to New York Attorney General Eric Schneiderman (May 24, 2011). A copy is available from the author.

⁵⁴ *See, e.g.*, Environmental Impact Statements: Guidelines for Preparation, 36 Fed. Reg. at 20,381-82 (Oct. 21, 1971); *see also* Amended Complaint at ¶ 31.

⁵⁵ *See* Proposed Amendments to Administrative Manual—Rules of Practice and Procedure, 62 Fed. Reg. at 45,766 (Aug. 29, 1997) (relating the history of the DRBC’s NEPA review procedures); *see also* Amended Complaint at ¶ 32.

⁵⁶ Amendments to Administrative Manual—Rules of Practice and Procedure, 62 Fed. Reg. at 64,154 (Dec. 4, 1997) (showing that Article 4 of the DRBC’s administrative manual, which formerly contained its NEPA procedures, had been deleted); *see also* Amended Complaint at ¶ 32.

⁵⁷ Memorandum in Support of American Petroleum Institute et al.’s Motion To Intervene in Support of Defendants at 2, 11-15, *New York v. U.S. Army Corps of Eng’rs*, No. 11-2599 (E.D.N.Y. Aug. 5, 2011).

⁵⁸ This report will be updated to evaluate the parties’ respective arguments when filings are made.

The state of New York has brought a lawsuit against the DRBC and five federal agencies, arguing that they must prepare an EIS before approving natural gas development in the Delaware River Basin. The DRBC has argued that the approval of the regulations is not a federal action requiring an EIS because the DRBC is not a federal agency. It has also argued that the participation of a federal member on the five-member DRBC does not make the approval of the regulations a federal action.

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