

Mark S. Barron
L. Poe Leggette (Wyoming Bar No. 7-4652)
Alexander K. Obrecht (Wyoming Bar No. 7-5442)
BAKER & HOSTETLER LLP
1801 California Street, Suite 4400
Denver, Colorado 80202-5835
Telephone: 303.861.0600
Facsimile: 303.861.7805
mbarron@bakerlaw.com
pleggette@bakerlaw.com
aobrecht@bakerlaw.com

*Attorneys for Petitioners Independent Petroleum Association of America
& Western Energy Alliance*

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF WYOMING**

INDEPENDENT PETROLEUM)
ASSOCIATION OF AMERICA, and)
WESTERN ENERGY ALLIANCE,)
)
Petitioners,)
)
v.)
)
SALLY JEWELL, in her official)
capacity as Secretary of the United States)
Department of the Interior, and)
BUREAU OF LAND MANAGEMENT,)
)
Respondents.)
_____)

Civil Case No. 2:15-CV-00043-SWS
[Lead Case]

[Consolidated with No. 2:15-CV-00041-SWS]

TABLE OF CONTENTS

	Page
I. THE PROPOSED REGULATIONS.	1
II. STANDARD OF REVIEW.	3
III. THE RULE MUST BE SET ASIDE.	5
A. THE FINAL RULE LACKS JUSTIFICATION.	7
1. BLM May Not Rely on Unsubstantiated Public Concern.	7
2. BLM has not Identified any Gap in Existing Regulations.	10
3. “Frack Hits” were not Raised in the Proposed Rule.	12
B. TESTING INTEGRITY OF THE LATERAL WELLBORE SERVES NO PURPOSE.	13
C. BLM’s REDEFINED “USABLE WATER” DISREGARDS EXISTING LAW AND PRACTICE.	17
1. The Final Rule Effects an Unexplained Departure from Existing Law.	18
2. Regulators have Historically Identified “Usable Water.”	22
D. THE FAILURE TO PROTECT TRADE SECRETS AND CONFIDENTIAL COMMERCIAL INFORMATION IS CONTRARY TO FEDERAL LAW.	25
E. THE RECOVERED FLUIDS STORAGE REQUIREMENTS ARE NOT RATIONALLY STRUCTURED.	33
1. The Recovered Fluids Storage Requirements are Inapplicable.	34
2. BLM Disregarded the Environmental and Economic Costs of the Storage Tank Requirement.	35
F. OPERATORS DO NOT HAVE INFORMATION NECESSARY TO COMPLY WITH CERTIFICATION REQUIREMENTS.	38
G. THE CEL REQUIREMENT MUST BE BASED ON MORE THAN UNSUPPORTED ASSUMPTIONS.	41
H. BLM’s ASSESSMENT OF ADMINISTRATIVE COSTS FAILS TO ACCOUNT FOR EVIDENCE IN THE RECORD.	44
I. BLM LACKS JURISDICTION TO REGULATE HYDRAULIC FRACTURING.	47
IV. CONCLUSION.	52

OPENING MEMORANDUM ON THE MERITS

Petitioners Independent Petroleum Association of America (“IPAA”) and Western Energy Alliance (collectively “Petitioners”) submit respectfully this memorandum in support of Petitioners’ administrative appeal. On March 26, 2015, Respondent Bureau of Land Management (“BLM”) issued a final rule that purports to regulate hydraulic fracturing on federal and Indian lands, *see* 80 Fed. Reg. 16,128 (Mar. 26, 2015). Because BLM’s rule lacks the legal, technical, or engineering bases necessary for this Court to sustain the agency’s action, the Court should set aside the rule as arbitrary, capricious, in excess of BLM’s jurisdiction, and contrary to law.

I. THE PROPOSED REGULATIONS.

For the better part of the last decade, oil and natural gas production from domestic wells has increased steadily. Virtually all of this increased production has come through the application of the well stimulation technique known as hydraulic fracturing — the procedure by which oil and gas producers inject water, sand, and certain chemicals into tight-rock formations (typically shale) to create fissures in the rock that allow oil and gas to escape for collection in a well. *See* 80 Fed. Reg. at 16,131 (estimating that ninety percent of wells drilled on federal lands in 2013 were stimulated using hydraulic fracturing). Hydraulic fracturing has been used to stimulate wells in the United States for decades — traditionally in conventional limestone and sandstone reservoirs — and meaningful attempts to use the technique to extract hydrocarbons from shale date back to at least the 1970s. *See* Admin. R. (“A.R.”) at DOIAR0025662, Adam Wilson, *Econ. & Tech. Drive Dev. of Unconventional Oil & Gas Reservoirs*, J. Petroleum Tech. (July 2012) (“Wilson”) (“The increase in oil and gas prices

during the 1970s led to both an increase of rig count and the development of new technologies, such as massive hydraulic fracturing.”). BLM officials acknowledge that the oil and gas industry has been using hydraulic fracturing “since the late 1940s” and have described hydraulic fracturing as “a proven process with minimal technical problems.” A.R. at DOIAR002408, Mem. from Michael D. Nedd, Assistant Dir., Minerals & Realty Mgmt. to Robert V. Abbey, Dir., BLM (Apr. 7, 2010).

On May 11, 2012, BLM issued proposed regulations purporting to “regulate hydraulic fracturing on public land and Indian land.” 77 Fed. Reg. 27,691, 27,691 (May 11, 2012). The proposed rule focused on: (i) construction standards to ensure wellbore integrity; (ii) public disclosure of chemical additives injected during production operations; and (iii) plans for management of water produced during oil and gas operations. *See id.* BLM reports that it received approximately 177,000 public comments on this initial proposal. *See* 80 Fed. Reg. at 16,131.

More than a year later, on May 24, 2013, BLM issued a revised proposed rule, representing that the agency had “used the comments on [the May 2012 draft rule] to make improvements” to the agency’s proposal. 78 Fed. Reg. 31,636, 31,636 (May 24, 2013). Key changes included the ability to use a broader range of cement evaluation tools to test the integrity of a well’s cement casing and revised administrative processes for how operators might report chemicals used to stimulate wells after operations were completed. *See id.* at 31,637. BLM also expressed its intent to “work with States and tribes to establish formal agreements that will leverage the strengths of partnerships, and reduce duplication of efforts for agencies and operators, particularly in implementing the revised proposed rule as consistently as possible with

State or tribal regulations.” *Id.* BLM reports that it received more than 1.35 million public comments responsive to the revised proposal. *See* 80 Fed. Reg. at 16,131.

On March 20, 2015, almost three years after issuing its initial proposal, BLM issued the final version of its rule now at issue here.¹ *See* 80 Fed. Reg. 16,128. The rule’s focus continues to be on the same three aspects of oil and gas development — wellbore construction, chemical disclosures, and water management — each of which is subject to comprehensive regulations under existing federal and state law. *See id.* (explaining the purpose of the rule is to “ensure that wells are properly constructed,” that recovered fluids “are managed in an environmentally responsible way,” and “to provide public disclosure of the chemicals used in hydraulic fracturing fluids”). BLM estimates that the rule will affect at least 2,800 hydraulic fracturing operations per year immediately but that the number of wells affected may grow by a factor of more than thirty-five percent. *See id.* at 16,130.

II. STANDARD OF REVIEW.

On March 20, 2015, Petitioners filed their petition for review of final agency action under the Administrative Procedure Act, 5 U.S.C. §§ 701-706 (“APA”). Under the APA, the reviewing court, must “hold unlawful and set aside agency action” determined to be: “(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (B) contrary to constitutional right, power, privilege, or immunity; (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; [or] (D) without observance of procedure required by law.” 5 U.S.C. § 706(2)(A)-(D); *see also Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1574 (10th Cir. 1994) (construing 5 U.S.C. § 706(2)(A)-(D) as providing “the

¹ Although announced on March 20, 2015, the final rule was published in the *Federal Register* on March 26, 2015.

generally applicable standards”). The court must set aside an agency action “unless it is supported by substantial evidence in the administrative record.” *Via Christi v. Leavitt*, 509 F.3d 1259, 1271 (10th Cir. 2007) (internal quotation marks omitted). *See also* 5 U.S.C. § 706(2)(E). In determining whether substantial evidence supports the agency’s decision, “the court must also consider that evidence which fairly detracts from the [agency’s] decision.” *Hall v. U.S. Dep’t of Labor*, 476 F.3d 847, 854 (10th Cir. 2007).

Agency action must be “based on a consideration of the relevant factors.” *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*, 419 U.S. 281, 285 (1974). An agency must also “consider and respond to significant comments received during the period for public comment.” *Perez v. Mortg. Bankers Ass’n*, 135 S. Ct. 1199, 1203 (2015). Because “an agency’s action must be upheld, if at all, on the basis articulated by the agency itself,” *Motor Vehicle Mfrs. Ass’n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 50 (1983), “the grounds upon which the agency acted must be clearly disclosed in, and sustained by, the record.” *Olenhouse*, 42 F.3d at 1575.

“The agency itself must supply the evidence of that reasoned decisionmaking in the statement of basis and purpose mandated by the APA,” i.e., the rule’s preamble. *Int’l Bhd. of Teamsters, Chauffeurs, Warehousemen & Helpers of Am. v. United States*, 735 F.2d 1525, 1531 (D.C. Cir. 1984). The agency’s reasoning must appear in the regulatory preamble, *see id.*, because the preamble is the authoritative explanation of agency action. *See Wyo. Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 53 (D.C. Cir. 1999) (“[W]e have often recognized that the preamble to a regulation is evidence of an agency’s contemporaneous understanding of its proposed rules.”). “After-the-fact rationalization by counsel in briefs or

argument will not cure noncompliance by the agency with these principles.” *Olenhouse*, 42 F.3d at 1575.

III. THE RULE MUST BE SET ASIDE.

Since 1920, the Mineral Leasing Act has authorized the Secretary of the Interior “to prescribe necessary and proper rules and regulations and to do any and all things necessary to carry out and accomplish the purposes of this chapter.” 30 U.S.C. § 189. Congress’ purpose in enacting the Mineral Leasing Act was “[t]o promote the mining of coal, phosphate, oil, oil shale, and sodium on the public domain.” Act of Feb. 25, 1920, ch. 85, § 32, 41 Stat. 437. Congress has determined that it is “in the national interest to foster and encourage private enterprise in,” among other endeavors, “the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs.” Mining & Minerals Policy Act of 1970, 30 U.S.C. § 21a. Congress has instructed that “[i]t shall be the responsibility of the Secretary of the Interior to carry out this policy when exercising [her] authority under such programs as may be authorized by law.” *Id.*

As BLM recognizes in the regulatory preamble, *see* 80 Fed. Reg. at 16,137, the Federal Land Policy & Management Act (“FLPMA”) obligates BLM to “manage the public lands under principles of multiple use and sustained yield.” 43 U.S.C. § 1732(a). To meet this obligation, BLM must consider “a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources.” 43 U.S.C. § 1702(c). The result of this statutory scheme is that, while BLM has a responsibility to “prevent unnecessary or undue degradation of the [public] lands,” 43 U.S.C. § 1732(b), accounting for the productivity of the federal mineral estate is a statutory imperative.

Because “FLPMA prohibits only unnecessary or undue degradation, not *all* degradation,” BLM must ensure that regulatory measures do not prevent the extraction of federal minerals. *Theodore Roosevelt Conservation P’ship v. Salazar*, 661 F.3d 66, 78 (D.C. Cir. 2011) (holding setbacks that protected sage-grouse but which prevented natural gas extraction did not satisfy BLM’s obligation to balance development with conservation). The Interior Board of Land Appeals has interpreted “unnecessary or undue degradation” to mean the occurrence of “something more than the usual effects anticipated’ from appropriately mitigated development.” *Id.* at 76 (quoting *Biodiversity Conservation Alliance*, 174 IBLA 1, 5-6 (2008)). More than speculation is required: “Without evidence that future injury will occur, it cannot be argued that degradation of the lands will occur, . . . or that the future degradation is unnecessary or undue.” *Wyo. Outdoor Council*, 171 IBLA 108, 121-22 (2007) (internal quotations marks omitted).

Congress has also directed that access to federal lands for energy development must be efficient. BLM is required “[t]o ensure timely action on oil and gas leases and applications for permits to drill” and to effect policy that: (i) “ensures[s] expeditious compliance” with the National Environmental Policy Act and any other applicable environmental and cultural resources laws; (ii) “improve[s] consultation and coordination with the States and the public”; and (iii) “improve[s] the collection, storage, and retrieval of information relating to the oil and gas leasing activities.” Energy Policy Act of 2005, 42 U.S.C. § 15921(a)(1)(A)-(C). Because the final hydraulic fracturing rule fails to consider the “relevant factors” Congress has prescribed in these statutes, the rule is arbitrary and capricious and should be set aside.

A. THE FINAL RULE LACKS JUSTIFICATION.

A decision “based on random or convenient selection or choice rather than on reason or nature” is the essence of both the legal and dictionary definition of arbitrary. *Webster’s Third New Int’l Dictionary* 110 (1986). In the absence of a “rational justification” for the agency’s action, the “APA’s arbitrary and capricious standard” requires that the action be set aside. *Shays v. Fed. Election Comm’n*, 414 F.3d 76, 97 (D.C. Cir. 2005); *see also Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43 (noting that the agency must articulate a “rational connection between the facts found and the choice made”); *Sierra Club N. Star Chapter v. LaHood*, 693 F. Supp. 2d 958, 963 (D. Minn. 2010) (describing a change in agency policy without explanation justifying the change as “the hallmark of an arbitrary and capricious decision”). BLM has not substantiated the existence of problem this rule is meant to address, identified the gap in existing regulations the final rule will fill, or described the objectives the final rule will achieve.

1. BLM May Not Rely on Unsubstantiated Public Concern.

The chief justification BLM identifies for its final rule is “public concern about whether fracturing can lead to or cause the contamination of underground water sources.” 80 Fed. Reg. at 16,128. BLM does not appear to have considered whether this concern is substantiated, for there is no technical discussion in the regulatory preamble related to the likelihood of hydraulic fracturing operations impacting underground water sources. To the contrary, the Lead Petroleum Engineer of BLM’s Fluid Mineral Division, Subijoy Dutta — one of the principal authors of the hydraulic fracturing rule, *see* 80 Fed. Reg. at 16,217 — has declared the assertion that “[f]racking fluids from all hydraulic fracturing operations are getting into groundwater” as a

“Myth.” A.R. at DOIAR0051928, *Hydraulic Fracturing - Myths & Realities* (July 12, 2012) (“Myths & Realities”).

Mr. Dutta’s position is consistent with the understanding of the federal government’s most senior officials charged with implementing environmental policy during the period of this rulemaking, including: the former and current Environmental Protection Agency (“EPA”) Administrator; the former and current Secretary of the Interior; the former and current BLM Director; and the Secretary of Energy. *See* A.R. at DOIAR0056627-28, Pub. Cmt., Am. Petroleum Inst. (“API”) (Aug. 23, 2013) (collecting comments of senior government officials acknowledging a lack of confirmed cases of groundwater contamination resulting from hydraulic fracturing).² Numerous commenters pointed out during the public comment process that both experts and government regulators have repeatedly acknowledged a lack of any evidence linking the hydraulic fracturing process to groundwater contamination. *See id.*; A.R. at DOIAR0056216-56222, Pub. Cmt., IPAA & W. Energy Alliance (“IPAA”) (Aug. 22, 2013) (collecting studies and commentary from both experts and government regulators repeatedly acknowledging a lack of any evidence linking the hydraulic fracturing process to groundwater contamination). Yet BLM fails to reference a single confirmed case of hydraulic fracturing contaminating

² These officials include: (i) former EPA Administrator Lisa Jackson (“There is no proven case where the fracking process itself has affected water.”); (ii) former BLM Director Robert Abbey (“BLM has never seen any evidence of impacts to groundwater from the use of fracking technology on wells that have been approved by [BLM]... We believe based upon the track record so far that it is safe.”); (iii) former Secretary of the Interior Ken Salazar (“With respect to hydraulic [fracturing] because it occurs so far underground we don’t know any examples of [impacts] on public lands.”); (iv) EPA Administrator Gina McCarthy (“I am not aware of any definitive determinations that would contradict those statements [by Lisa Jackson, referenced above.]”); (v) BLM Director Neil Kornze (“I don’t think we are aware of any clear approving cases.”); (vi) Secretary of the Interior Sally Jewell (“I’m not aware of documented cases.”); (vii) EPA Senior Advisor Ken Kopocis (“No, I am not [aware of documented cases.]”); and (viii) Secretary of Energy Ernest Moniz (“To my knowledge I still have not seen any evidence of fracking, per se, contaminating groundwater.”).

groundwater.³ And BLM ignores extensive evidence in the record documenting the lack of such incidents, particularly in light of the widespread use of hydraulic fracturing. *See* A.R. at DOIAR0065277, King & King, *Envtl. Risk Arising from Well Constr. Failure: Difference Between Barrier & Well Failure, & Estimates of Failure Frequency Across Common Well Types, Locations & Well Age*, Soc’y of Petroleum Eng’rs 166142 (2013) (observing that a study of 16,000 horizontal shale wells drilled in Texas failed to identify “a single groundwater contamination incident resulting from site preparation, drilling, well construction, completion, hydraulic fracturing stimulation, or production operations at any of these horizontal shale gas wells”).⁴

To the extent BLM contends that the alleged public concern results from “increased complexity” in hydraulic fracturing operations or “larger-scale operations,” *see* 80 Fed. Reg. at 16,128, that argument is meritless. Such an argument does not account for detailed evidence in the record documenting the history of large-scale hydraulic fracturing operations, publicly available academic discussions of complex hydraulic fracturing operations dating back decades, and federal officials’ acknowledgment that hydraulic fracturing is a “[w]ell stimulation technique

³ Some proponents of additional regulation have responded to this lack of evidence by using “hydraulic fracturing” as a proxy for oil and gas development operations. But this definition of convenience misses the mark. Though undoubtedly important, hydraulic fracturing is only one component of the oil and gas extraction process (and an ephemeral one at that). Hydraulic fracturing is not the entire process of drilling, casing a well, and producing oil and natural gas. Because each part of the development process bears specific and unique risks, regulatory policy aimed at any particular aspect should address the risks that aspect poses. As BLM’s current rulemaking evidences, conflating any one operational aspect with the entire exploration and production process could result in counterproductive public policies, including the implementation of new rules or regulations that do not solve any legitimate problems.

⁴ *See also* A.R. at DOIAR0051928, Myths & Realities (Dutta observing that “[h]ydraulic fracturing has been deployed more than 57,000 times in Kansas since 1947 with no documented cases of groundwater contamination”); *id.* at DOIAR0052533, Testimony of Cathy P. Foerster, Alaska Oil & Gas Conservation Comm’n Chair and Eng’g Comm’r (July 24, 2013) (“Moreover in its history of oil and gas operations Alaska has yet to suffer a single documented instance of subsurface damage to an underground source of drinking water.”); *id.* at DOIAR0053101, “Four Corners Tribal Summit” (Aug. 2013) (emphasizing that although “Hydraulic fracturing has been going on in the San Juan since the 40s . . . [t]here has never been an incident of water contamination in the San Juan.”).

that has been employed by the oil and gas industry since 1947.” See A.R. at DOIAR0027608, BLM, *Hydraulic Fracturing 101* (Aug. 29, 2012).⁵ Given this background, it is not surprising that the regulatory preamble neither discusses which features of alleged “larger-scale operations” the final rule is meant to address nor describes how the final rule accounts for the alleged “increased complexity” of contemporary oil and gas operations.

Public concern is a perfectly legitimate reason to initiate a rulemaking, to investigate an issue, and to gather data; but public concern alone cannot serve as a justification for the final rule. “[U]nsubstantiated assumptions are insufficient justification and rational[e] to support the [agency’s] promulgation of this regulation.” *Serv. Emps. Int’l Union, AFL-CIO, v. Gen. Servs. Admin.*, 830 F. Supp. 5, 10 (D.D.C. 1993) (emphasizing that an agency must rely on evidence, and not conclusory statements, to justify a rulemaking). More than mere speculation is required for a final rule.

2. BLM has not Identified any Gap in Existing Regulations.

The final rule fails to account entirely for states’ long history of successfully regulating oil and gas development, including hydraulic fracturing. BLM recognizes that “[s]ome states, including Alaska, Arkansas, Colorado, Illinois, Michigan, New Mexico, Ohio, Oklahoma, Pennsylvania, Texas, Utah, and Wyoming have regulations in place addressing hydraulic

⁵ See also A.R. at DOIAR0050813, Letter from Lee O. Fuller (IPAA) to Hon. Ron Wyden & Hon. Lisa Murkowski (May 30, 2013) (quoting Hr’g on the Sec’y of Energy Advisory Bd.’s Shale Gas Prod. Subcommittee’s 90-day Report Before the S. Comm. on Energy & Natural Resources 4, 112th Cong. (Oct. 4, 2011) (written testimony of Stephen A. Holditch) (“I have been working in hydraulic fracturing for 40+ years and there is absolutely no evidence hydraulic fractures can grow from miles below the surface to the fresh water aquifers; *id.* at DOIAR56217, IPAA (same); *id.* at DOIAR0001188, Boyer et al., *Producing Gas from its Source*, OILFIELD REVIEW (Autumn 2006) (describing the application of “massive hydraulic fracturing treatments” in the Barnett Shale beginning in the mid-1980s); *id.* at DOIAR0025662, Wilson (“The increase in oil and gas process during the 1970s led to both an increase of rig count and the development of new technologies, such as massive hydraulic fracturing.”); Sally Jewell, Sec’y, Dep’t of the Interior, Nat’l Press Club Luncheon Series at 51:00-:10 (Oct. 31, 2013) (“Fracking has been an important tool in the toolbox for oil and gas for over fifty years.”), available at: <https://www.youtube.com/watch?v=oBXXK4n80sBs>.

fracturing operations.” 80 Fed. Reg. at 16,130. BLM has not explained how it identified these specific states or why it failed to include numerous other states that have regulations that address hydraulic fracturing. BLM observes that, from fiscal year 2010 to fiscal year 2013, more than 99.3 percent of all well completions on federal and Indian lands occurred in nine states. *See* 80 Fed. Reg. at 16,187 (acknowledging that BLM reviewed regulations in California, Colorado, Montana, New Mexico, North Dakota, Oklahoma, Texas, Utah, and Wyoming). BLM’s list of states with hydraulic fracturing regulations omits three of the states with significant activity on federal lands — California, Montana, and North Dakota — yet all three of these states have rules addressing hydraulic fracturing. *See* CAL. CODE REGS. tit. 14, §§ 1751-89; MONT. ADMIN. R. 36.22.601-608 & 36.22.1001-1016; N.D. ADMIN. CODE 43-02-03-27.1. BLM also fails to list numerous other states identified in the administrative record that have regulations that address hydraulic fracturing. *See* A.R. at DOIAR0056214-216, Pub. Cmt., IPAA (citing regulations in additional states including Alabama, Arizona, Louisiana, Mississippi, Nevada, and South Dakota).

BLM’s most significant omission, however, is not states that *do* have regulations governing hydraulic fracturing, it is the agency’s failure to identify any states that *do not* have regulations adequate to achieve the objectives of the final rule. BLM has not identified a single jurisdiction in which it contends hydraulic fracturing occurs on federal lands without sufficient regulatory protections. BLM has no evidence that its costly proposed rule will be any more effective in practice than existing state regulations protecting water and other environmental values. In fact, senior officials within the agency have warned that “[d]iverting [BLM’s] resources from those important duties [related to public safety] to duplicate state functions that to

date have proven to be 100% successful in preventing harm to the environment does not seem to be an effective or efficient use of limited taxpayer funds.” A.R. at DOIAR0009170, Mem. from Jerry Stranahan, Branch Chief, Fluid Minerals, Colo. State Office to Steven Wells (Dec. 22, 2011).⁶ Because BLM has failed to “examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made,” the final rule is arbitrary and must be set aside. *Sorenson Comm’cns, Inc. v. Fed. Comm’cns Comm’n*, 567 F.3d 1215, 1220-21 (10th Cir. 2009) (holding restrictions on lobbying expenses promulgated without justification were arbitrary and capricious).

3. **“Frack Hits” were not Raised in the Proposed Rule.**

Lacking substantial evidence of groundwater contamination, BLM now offers the prevention of “frack hits” to support the final rule. *See* 80 Fed. Reg. at 16,193. “Frack hits” concern the transmission of fluids from one wellbore in a producing formation to another wellbore in that same formation. “Frack hits” were an alleged problem BLM identified after the close of the comment period — the term “frack hits” does not appear in the August 2013 supplemental proposed rule. *See* 78 Fed. Reg. 31,636 (May 24, 2013); *see also* 80 Fed. Reg. at 16,149 (conceding that the requirements in the final rule “that will allow the BLM to determine during the permit review process the potential for ‘frack hits’” were not included in the supplemental proposed rule); A.R. at DOIAR0070125, *Policy Calls for the Hydraulic Fracturing Rule* (Dec. 20, 2013) (“The proposed rule does not address ‘frack hits.’”).

⁶ *See also* A.R. at DOIAR0026852, Mem. from Robin L. Hansen, Senior Petroleum Eng’r, Vernal Field Office to Dep’t of Interior (Aug. 16, 2012) (“Will the implementation of the new regulations add any additional protection to the useable water zones than the regulations and field office requirements that are currently imposed on oil and gas operators under the Vernal Field Office at present? The answer is no.”).

Whether “frack hits” represent a concern that BLM should address is a question not before this Court. The Court must only decide whether measures to protect against “frack hits” were presented during the rulemaking such that the prevention of “frack hits” might serve as a justification for the final rule. A review of the administrative record is conclusive on this point. There are no comments in the administrative record regarding the efficacy of BLM’s proposed solution to prevent “frack hits.” There are no comments in the administrative record evaluating, from an economic or legal perspective, who is financially responsible when repairs need to be made to offset wells to address concerns about “frack hits.” There are no comments in the administrative record discussing the legal implications of compelling offset well owners to shut in, even temporarily, and what consequences such an order might have on the correlative rights of offset well owners. These are all difficult and complicated technical, legal, and economic questions — the type of questions that notice and comment rulemaking would have helped to resolve. Because the issue of “frack hits” is not one that the agency raised, or that was part of discussions between stakeholders and the agency during the rulemaking process, BLM may not now rely on “frack hits” to justify the final rule.⁷

B. TESTING INTEGRITY OF THE LATERAL WELLBORE SERVES NO PURPOSE.

The final rule requires that before hydraulic fracturing operations begin, the operator must perform a successful mechanical integrity test (“MIT”) of any casing or fracturing string

⁷ The Chief of the BLM’s Fluid Mineral Division, Steven Wells, has conceded that measures to protect against “frack hits” are not a logical outgrowth from the proposed rule and therefore cannot be implemented without a new notice allowing the public an opportunity to consider and comment on the proposed provisions. *See* Tr. of Prelim. Injunction Proceedings at 90:5-91:7 (Naatz) (June 23, 2015) (“Hr’g Tr.”). Wells was present in the Courtroom when Dan Naatz, IPAA’s Vice-President of Government Relations, testified regarding Wells’ statements. Neither Wells nor the Department of Justice made any effort to contradict Naatz’ testimony during the hearing on the motions for preliminary injunction.

through which the operation will be conducted. *See* 43 C.F.R. § 3162.3-3(f). This requirement applies not only to vertical casing that is designed to protect usable water, but also to horizontal laterals. *See* 80 Fed. Reg. at 16,159 (explaining that the purpose of the MIT requirement is to ensure that “the entire length of casing or fracturing string, not just the vertical section, prior to the perforations or open-hole section of the well, is able to withstand the applied pressure”). BLM’s Onshore Oil and Gas Order No. 2 already requires operators to conduct extensive casing integrity tests to ensure that all casing can withstand the pressures to which the wellbore will be subject during hydraulic fracturing. *See* Onshore Oil and Gas Order No. 2, Drilling Operations § III.B.h & i, 53 Fed. Reg. 46,798, 46,809 (Nov. 18, 1988) (“Onshore Order 2”). BLM emphasizes, however, that the MIT required under the final rule “is not equivalent” to the casing pressure tests operators are currently conducting. 80 Fed. Reg. at 16,160. Aside from generalized assertions that the MIT requirement is consistent with industry guidance and state regulations (without citation to any particular regulations), BLM offers no explanation for modifying the pressure test requirement.⁸

BLM’s deletion of the provision in the proposed rule that limited the application of the MIT requirement to the vertical portion of the wellbore represents the best illustration of BLM’s failure to justify the MIT requirement. *See* 80 Fed. Reg. 16,159 (“The requirement to only perform an MIT on vertical sections of the wellbore in the supplemental proposed rule is also

⁸ BLM rejected input from commenters suggesting that, if the agency were to distinguish an MIT from the current “casing pressure test,” BLM should define the term “mechanical integrity test” for the purposes of the rule. 80 Fed. Reg. at 16,160. BLM declined to provide such a definition, contending that “the term ‘Mechanical Integrity Test’ is widely understood by the industry.” *Id.* BLM is incorrect. No consensus definition of an MIT exists. *See* Mem. in Supp. of Mot. for Prelim. Inj. at 13-15, No. 2:15-CV-00041-SWS, filed May 15, 2015 (ECF No. 13) (discussing various definitions of mechanical integrity test under numerous states’ regulations and industry guidance documents); Record Citations in Supp. of Mot. for Prelim. Inj. at 19-20, No. 2:15-CV-00043-SWS, filed Sept. 18, 2015 (ECF No. 127) (collecting citations from the administrative record documenting numerous distinct usages for the term “mechanical integrity test”).

deleted in the final rule.”). The lateral part of a horizontal well is the part of the well that is in the producing formation. By BLM’s definition, the producing formation is not a “usable water” formation. *Id.* at 16,218. The administrative record does not contain comments regarding the efficacy, cost, or purpose of testing the lateral portion of the wellbore because that requirement was not part of the proposed rule. *See* 78 Fed. Reg. 31,636, 31,676 (May 24, 2013) (requiring that operator “perform a successful mechanical integrity test (MIT) of the vertical sections of the casing”). And BLM has not provided any explanation of how conducting an MIT on casing that does not protect usable water and that is to be intentionally perforated advances the objectives of the final rule.⁹

BLM concedes that the final rule’s MIT requirement is distinct from the casing integrity tests that operators now perform. Relying on BLM’s own distinction, the MIT therefore represents a requirement to which operators are not presently subject. Yet BLM concludes that the requirement does not pose an incremental cost. *See* 80 Fed. Reg. at 16,198. BLM does not explain how a new test that operators are not presently required to apply can have no incremental costs on operations.

BLM’s failure to attribute any cost to the MIT requirement cannot be reconciled with BLM’s acknowledgement that “certain wellbore configurations may require modifications to perform this test.” 80 Fed. Reg. at 16,160. For a horizontal well, where the lateral portion of the well is entirely in the zone to be completed, the MIT requirement is a mechanically onerous and expensive proposition. BLM understands that such modifications may be necessary, among other

⁹ BLM acknowledges that when an operator tests an already perforated lateral in a re-fracturing operation, the perforated portion of the lateral need not be subject to the MIT. *See* 80 Fed. Reg. at 16,159. BLM fails to explain the basis for treating the same lateral differently in different fracturing operations.

circumstances, “when the configuration contains a pressure-actuated valve or sleeve at the end of a lateral completion” or when an operator is using an “open-hole completion.” *Id.* To conduct these tests, operators will have to use complicated tools to seal off the toe of the well during testing or rely on tubing conveyed perforation techniques after the pressure test.¹⁰ Yet BLM neither conducted a survey to determine how frequently wellbore construction methods that will require these modifications are used on federal lands nor provided any information about the cost of modifications necessary to perform the MIT when these methods are employed.

These failures implicate the validity of BLM’s rulemaking. The result of BLM’s approach is that operators are now faced with a requirement to perform a test without any understanding of what that test is or of how it should be conducted. When a definition is central to the operation of a rule and the agency “has failed to define the terms at all,” the rule is arbitrary. *Qwest Corp. v. Fed. Commc’ns Comm’n*, 258 F.3d 1191, 1202 (10th Cir. 2001) (holding agency action to be arbitrary for failing to define two key terms).

And even if it were possible to comply with the final rule’s MIT requirement, BLM has failed to justify modifying the pressure test requirement currently implemented through Onshore Order No. 2. “[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute.” *Greater Boston Television Corp. v. Fed. Commc’ns Comm’n*, 444 F.2d 841, 852 (D.C. Cir. 1970) (footnote omitted). BLM’s failure to

¹⁰ BLM had reason to know that these provisions would be expensive and to investigate the associated costs. Operators observed during the public comment period that “the proposed [MIT] requirement does not contemplate the use of down-hole tools (e.g. toe sleeve) for horizontal development, which may result [in] significant new cost and/or limit an operator’s well design options.” A.R. at DOIPS0179037, Pub. Cmt., Encana Oil & Gas (USA) Inc. (“Encana”) (Aug. 23, 2013).

explain why the undefined MIT will be more effective in ensuring casing integrity than the tests operators have been using (and BLM has been accepting) successfully for years requires the Court set aside the requirement.

C. BLM's REDEFINED "USABLE WATER" DISREGARDS EXISTING LAW AND PRACTICE.

The heart of the final rule is the identification and isolation of "usable water." Since 1982, operators have been required to "isolate freshwater-bearing [formations] and other usable water containing 5,000 ppm ["parts per million"] or less of dissolved solids . . . and protect them from contamination." 43 C.F.R. § 3162.5-2(d) (2014). Under the 1982 rule, "fresh water" is defined to mean "water containing not more than 1,000 ppm of total dissolved solids" or other toxic constituents. 43 C.F.R. § 3160.0-5 (2014). The 1,000 ppm standard for "fresh water" is double the secondary maximum contaminant level EPA has designated for total dissolved solids ("TDS") in drinking water (500 ppm). *See* A.R. at DOIAR0056230, Pub. Cmt., IPAA; 40 C.F.R. § 143.3.

The final rule re-defines "usable water," modifying the term's definition to include "those waters containing up to 10,000 parts per million (ppm) of total dissolved solids." 43 C.F.R. § 3160.0-5 (2015). BLM offers no empirical evidence or science-based support for a need to protect water that is so saline that it can kill livestock, and which expands the scope of protected waters well beyond EPA's regulations under the Safe Drinking Water Act. Equally important, because BLM has taken an inaccurate view of the law, BLM has also failed to account for any of the significant costs complying with the new standards will cause operators to incur.

1. The Final Rule Effects an Unexplained Departure from Existing Law.

Gone from BLM's final rule is any reference to fresh water. The final rule amends 43 C.F.R. § 3162.5-2(d), revising the first sentence of the subsection to require the operator to "isolate all usable water and other mineral-bearing formations and protect them from contamination." 80 Fed. Reg. at 16,222. The final rule defines "usable water" as "[g]enerally those waters containing up to 10,000 parts per million (ppm) of total dissolved solids." 43 C.F.R. § 3160.0-5.

Petitioners challenged the BLM's reasoning for expanding the concept of "usable water" during the rulemaking process. Petitioners noted that a TDS concentration of 2,000 ppm is the highest recommended for irrigation and livestock consumption. *See* A.R. at DOIAR0056230-31, Pub. Cmt., IPAA. Petitioners cited authorities emphasizing that water "with 10,000 ppm or more 'may cause brain damage or death' in livestock." *Id.* at DOIAR0056231 (quoting G. Lardy et al., *Livestock & Water*, Table 9 (N.D. State Univ. Extension Serv. June 2008)). Other commenters noted that, "[i]n defining 'fresh water,' the World Health Organization's upper limit of acceptable palatable water for human consumption is 1,000 ppm TDS and North Dakota State University Extension Service advises farmers and ranchers that water quality is 'good' if it generally has less than 2,000 ppm TDS." A.R. at DOIPS0365300, Pub. Cmt., Devon Energy Corp. ("Devon") (Aug. 23, 2013).

BLM offers no empirical evidence or science-based support for a need to protect water that is so saline it can kill livestock. BLM contends instead that, despite the final rule containing an express revision to Section 3162.5-2(d), the final rule does not represent any change from existing requirements. BLM observes that Onshore Order No. 2, effective since December 1988,

provides that “casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones,” Onshore Order 2 § III.B, and defines “usable water” as “generally those waters containing up to 10,000 ppm of total dissolved solids.” *Id.* § II.Y, 53 Fed. Reg. at 46,805. BLM asserts here that the 1982 regulation (still in the Code of Federal Regulations) “was *superseded* by the Onshore Order 2 definition in 1988.” 80 Fed. Reg. at 16,196 (emphasis added). Relying on that assertion, BLM alleges that “[b]ecause the definition of usable water has not substantially changed” in the final rule, “there will be no significant changes in costs of running casing and cement.” 80 Fed. Reg. at 16,142 & 16,196 (attributing an “incremental cost” of “\$0” to the change in the usable water standard).

As a matter of law, Onshore Orders cannot “supersede” a rule. Nor did Onshore Order No. 2 purport to supersede or repeal the fresh-water rule. BLM may issue Onshore Orders “when necessary to implement and supplement the regulations in this part [43 C.F.R. Part 3160].” 43 C.F.R. § 3164.1(a). But “implement and supplement” does not mean “supersede.” In fact, rather than repeal any element of the 1982 regulations, Onshore Order No. 2 expressly cites the fresh-water rule as one of the authorities the Order implements. *See* 53 Fed. Reg. at 46,804 (“Specific authority for the provisions contained in this Order is found at . . . § 3162.5-2.”). And though BLM represents that “Onshore Order 2 superseded the existing regulations in 1988, because it was promulgated pursuant to notice-and-comment rulemaking,” 80 Fed. Reg. at 16,176, that position is inconsistent with express statement in the Code of Federal Regulations that Onshore Order No. 2 did *not* supersede any existing authority.¹¹ *See* 43 C.F.R. § 3164.1(b).

¹¹ Petitioners’ research has not disclosed, and BLM’s preamble has not cited, any case in which BLM required an operator after 1988 to protect water zones with greater than 5,000 ppm when the operator’s casing and cement was sufficient to protect water zones with less than 5,000 ppm. The only decision that appears relevant is ruling BLM’s

Evidence in the administrative record demonstrates that BLM's legal argument is inconsistent with the manner in which the agency has interpreted the rule historically and that BLM officials understand the final rule to represent a meaningful change in the legal standard.¹² *See, e.g.*, A.R. at DOIAR0005111, Decision Mem. for the Sec'y from Robert V. Abbey (Feb. 25, 2011) ("According to 43 CFR 3162.5-2(d) the operator is, at all times, responsible for ensuring that freshwater-bearing zones are isolated and protected from contamination during drilling and subsequent activities."); *id.* at DOIAR0005309, Mem. from Elizabeth Klein to Jason Bordoff & Dan Utech (Mar. 17, 2011) (same). By acknowledging in the regulatory preamble the "inconsistency" between the 5,000 ppm standard contained in 43 C.F.R. § 3162.5-2(d) and the 10,000 ppm standard in Onshore Order No. 2's definition of usable water, BLM admits that the

State Director for the Montana State Office issued in 1994. *David L. Robertson*, SDR No. 922-94-05 (BLM Mont. State Office, April 21, 1994), available at: http://www.blm.gov/style/medialib/blm/mt/blm_programs/energy/oil_and_gas/operations/sdrs.Par.38840.File.dat/922-94-05.pdf.

In *Robertson*, field officers had objected to an operator's proposed casing depth for the initial surface casing string because it was not deep enough to "protect shallow sources of usable water." On appeal, the operator showed that the proposed casing depth would "isolate the fresh water zones." The BLM State Director reversed the field officer's determination, agreeing that "setting the surface casing to a depth of 450 feet would isolate the fresh water sands in the glacial till from deeper aquifers with poorer water quality." *Id.* at 3. Given that "fresh water" was defined by rule as water with less than 1,000 ppm of TDS, this decision is not consistent with BLM's current portrayal of how it administered Onshore Order No. 2 in the presence of the "fresh water" regulation.

¹² It is clear that BLM officials understand the final rule to effect a change in the law and that, at the minimum, BLM was aware that the regulated community considered the final rule to effect a change in the law. *See, e.g.*, A.R. at DOIAR0021777, E-mail from David E. Blackstun to Steven Wells & Nicholas Douglas (May 22, 2012) (confirming Blackstun's understanding that the hydraulic fracturing rule would "broaden the scope of waters that operators must protect by raising the TDS concentration for usable water to 10,000 ppm"); *id.* at DOIAR0022886, E-mailed notes of Samuel B. Boxerman to Nancy DenHerder & Steven Wells (May 31, 2012) (explaining that under the hydraulic fracturing rule "[u]sable water would be redefined from 5,000 ppm or less of dissolved solids to water containing up to 10,000 ppm of dissolved solids") (citing 43 C.F.R. § 3160.0-5); *id.* at DOIAR0080261, Key Changes in the Hydraulic Fracturing Rule from Supplemental (May 2013) to Draft Final Rule (June 5, 2014) (acknowledging that the final rule "adopts standards set in the SDWA and Onshore Order No. 2"); *id.* at DOIAR0027276, Outline for Meeting Between ConocoPhillips and BLM (Aug. 23, 2012) (raising as a discussion issue that the "Proposed rule replaces current definition of 'fresh water' with 'usable water', defined as water 'containing up to 10,000 ppm of total dissolved solids'"); *id.* at DOIAR0027483, Meeting Notes: Industry Stakeholder Meeting to Discuss BLM's Proposed Hydraulic Fracturing Rule (June 28, 2012) (documenting industry understanding that "measures to protect usable water when operating at a depth that does not affect water introduces a new regulatory scheme"); Hr'g Tr. at 105:8-106:15 (Sgamma) (testifying that BLM field officials presented information materials to oil and natural gas operators indicating that the final rule modified the standard for water to be protected).

former remains viable today. *See* 80 Fed. Reg. at 16,141 & 16,196. Were that not the case, BLM would have no need for notice-and-comment rulemaking here to repeal the 1982 rule. But having engaged in notice-and-comment rulemaking, BLM cannot now disregard the agency's obligation to respond to comments on the change in policy and must defend the agency's conclusion that the new rule will not impose any incremental compliance costs.

BLM's elevation of Onshore Order No. 2 also overlooks important legal context. Onshore Order No. 2 adopted the 10,000 ppm standard "based on the regulatory definition by the Environmental Protection Agency of 'drinking water' at 40 CFR 144.3." 53 Fed. Reg. at 46798. Section 144.3, however, is a rule implementing EPA's underground injection control program under the Safe Drinking Water Act ("SDWA"), 42 U.S.C. §§ 300h – 300h-8; the SDWA is a statute BLM does not enforce and represents the product of an agency with a mandate distinct from BLM's mandate. Remaining mindful of BLM's obligation to prevent "undue degradation," BLM, unlike EPA, must promote mineral development and account for the productivity of the federal mineral estate. Yet the definition of "usable water" in BLM's final rule encompasses even more zones of water than EPA's definition of "underground source of drinking water" in 40 C.F.R. § 144.3.¹³ Unless BLM bases its new definition on the relevant statutory factors and supports the definition with substantial evidence, then BLM's out-of-context adoption of 10,000 ppm from another agency's statute becomes exactly the sort of "chance correspondence"

¹³ BLM admits as much, recognizing that "the final rule protects usable water, which includes, but is not limited to USDWs." 80 Fed. Reg. at 16,143. EPA's definition of an "underground source of drinking water" contains criteria beyond a simple numerical TDS content upon which BLM's final rule relies. EPA defines an "underground source of drinking water" as an aquifer (or portion of an aquifer) that supplies a public water system or a non-exempted aquifer that contains a sufficient quantity of ground water to supply a public water system and either currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids. *See* 40 C.F.R. § 144.3.

between different statutory provisions that the Supreme Court has rejected as a basis for reasoned rulemaking. *See Judulang v. Holder*, 132 S. Ct. 476, 484-85 (2011) (rejecting as arbitrary the Board of Immigration Appeal’s reliance on statutory factors applicable to determining whether aliens should be excluded from entering the United States in deportation proceedings designed to determine whether aliens already present were fit to remain in the United States).

BLM’s strained understanding of Onshore Order No. 2 is even more adrift from relevant statutory factors today than it would have been in 1988. In 2005, Congress amended the SDWA to exclude hydraulic fracturing from the operation of the underground injection control program. *See* discussion *infra* Part III.I. To use SDWA criteria now to regulate hydraulic fracturing on federal lands — after Congress exempted the practice from SDWA regulation — requires at the least careful justification in the administrative record, not a bureaucratic shrug of the shoulders.

2. Regulators have Historically Identified “Usable Water.”

Notwithstanding any disagreement regarding the *existing law* defining “usable water,” there is no disagreement of what is the *existing practice* for locating and protecting usable water. BLM disregards that, under the final rule, operators are assigned an affirmative obligation to identify the location of usable water to be protected based on a quantitative TDS calculation. *See* 43 C.F.R. § 3162.3-3(d)(1)(iii) (requiring identification of the “estimated depths (measured and true vertical) to the top and bottom of all occurrences of usable water”). This is a new burden.

Under current practice, state oil and gas agencies and BLM field offices inform operators about the location of usable water that must be protected, taking into account local geology, and direct the depths at which it is acceptable to set well casing. And while BLM agrees “that in many instances state or tribal oil and gas regulators, or water regulators, will be able to identify

for operators some or all of the usable water zones that will need to be isolated and protected,” 80 Fed. Reg. at 16,151, BLM has not explained how information received from states and field offices will assist operators to identify usable water of which even the regulators are unaware. Nor has BLM identified the “substantial evidence” supporting BLM’s apparent determination that compliance with the new rule is both feasible and free of further cost.¹⁴

BLM’s approach disregards extensive comments in the record emphasizing the difficulty and expense of measuring the numerical quality of water with the precision the final rule requires. As Petitioners explained, no logging tool directly measures TDS. *See* A.R. at DOIAR0056234, Pub. Cmt., IPAA. Logs are essential for identifying rock properties, but do not represent an effective tool for measuring water salinity. Operators often run resistivity logs for intermediate and production casing, and these logs might allow the qualitative identification of high-salt-content zones. These logs do not, however, directly measure TDS, and there are too many variables for the signature these logs record to be converted into accurate TDS data. *See* A.R. at DOIAR0056164, Pub. Cmt., ConocoPhillips Co. (Aug. 22, 2013) (explaining that that while in controlled conditions one might determine TDS measurements from well logging tools, there has been “little success applying the techniques”) (quoting *Borehole Geophysical Techniques for Determining the Water Quality & Reservoir Parameters of Fresh & Saline Water Aquifers in Tex.*, Report 343, Tex. Water Dev. Bd.); *id.* at DOIPS0301574, Pub. Cmt., ANGA &

¹⁴ BLM does not contest that existing practice involves federal and state regulators directing operators where to set casing based on the regulators’ understanding of where fresh water is located. For BLM’s position on the law to be tenable here, either those directions must have been based on the 10,000 ppm TDS standard, or BLM itself has been improperly granting APDs and authorizing ongoing operations in a manner inconsistent with the agency’s understanding of the law for almost thirty years. Giving BLM the benefit of the doubt and presuming the former, BLM still has not assured oil and gas producers that operators’ continued reliance on the directions that have been received from state and federal regulators historically are sufficient to represent compliance with the new rule’s usable water requirements. Without such an assurance, BLM’s failure to attach any compliance costs to the usable water provisions in the final rule, or even to study the question of what those costs might be, is fatal as a matter of administrative law.

AXPC (“ANGA”) (Aug. 23, 2013) (observing that while logs may allow an inference that salty water is present, they cannot do so “clearly enough to determine . . . an unambiguous 10,000 [ppm] TDS cutoff”).

BLM admits its awareness of the limitations on well logs: “BLM determined that it is not always necessary or practical to require a drill log to identify usable water and that there is no reason to be prescriptive about how usable water is identified.” 80 Fed. Reg. at 16,148. The issue is not BLM’s failure to be “prescriptive”; Petitioners oppose BLM not being “descriptive” of any feasible means to comply beyond the accepted current practice. BLM has not offered any alternative means to comply with the requirement to determine the location of water meeting the agency’s numerical definition of “usable water” or otherwise provided meaningful response to comments raising this concern. *See* A.R. at DOIAR0079317, Hydraulic Fracturing Meeting Notes (May 21, 2014) (posing question: “who is going to supply BLM with the usable water TDS information to determine usable water?”); *id.* at DOIPS0435828, Pub. Cmt., Marathon Oil Corp. (“Marathon”) (Aug. 23, 2013) (noting that “the revised proposed definition would require operators to collect new information regarding aquifers that have little or no potential to be considered future sources of drinking water or water to be used in industrial or agricultural application” and emphasizing that “[t]his would be a significant cost to Operators”).

BLM also fails to account for the impact of the final rule on operators that drilled and cased existing wells under the former practice, which, by BLM’s own calculation, includes any well drilled since at least 1988. BLM’s rule regulates all future hydraulic fracturing in both new and existing wells. *See* 43 C.F.R. § 3162.3-3(a). Having relied on prior government instruction about casing depths, operators of existing wells are at risk of having to add casing or cement to

comply with the new requirement. BLM's failure to address the impact of this change on those operators is a further act of arbitrariness. "[A]gencies may not impose undue hardship by suddenly changing direction, to the detriment of those who have relied on past policy." *Grace Petroleum Corp. v. Fed. Energy Regulatory Comm'n*, 815 F.2d 589, 591 n.4 (10th Cir. 1987).

To be sustained, BLM's decision-making must be reasoned. Whereas operators could previously rely on the guidance of state and federal regulators in setting their casing, now the burden of identification and risk of missing information shifts to the operators. BLM's preamble has failed to explain the reasons for this new approach, the costs and benefits of the new approach, or the evidence of harm (if any) incurred under the former approach. Without these explanations, BLM's final rule must be set aside. "If Congress established a presumption from which judicial review should start, that presumption . . . is . . . *against* changes in current policy that are not justified by the rulemaking record." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 42.

D. THE FAILURE TO PROTECT TRADE SECRETS AND CONFIDENTIAL COMMERCIAL INFORMATION IS CONTRARY TO FEDERAL LAW.

BLM's final rule represents a significant expansion of the information that oil and gas developers are required to disclose publicly both before and after operations. Before commencing hydraulic fracturing operations, producers will now be required to disclose to BLM operational information about the location where drilling will take place, water resources in the vicinity of operations, the location of other wells or natural fractures or fissures in the area, and the producer's fracturing plans (including the amount of fluid to be injected, the pressure to be applied to the formation, and the estimated length, height, and total vertical depth of the fractures). *See* 43 C.F.R. § 3162.3-3(d)(1)-(7). After hydraulic fracturing operations, operators will be required to disclose detailed operational information including the components of

hydraulic fracturing fluid used in stimulation, the pressures applied to geologic formations, the length, height, and direction of fractures, and the actual depth of perforations. *See* 43 C.F.R. § 3162.3-3(i). Much of this information, and particularly information regarding local geology and the operators' technical designs for extracting resources from that geology, is highly proprietary and represents economically valuable commercial information. Recognizing the value and proprietary nature of this data, BLM has provided a mechanism for operators to protect the information that is required to be submitted in the completion reports submitted after hydraulic fracturing. But BLM fails to provide any protection for the very similar information that is required to be submitted before hydraulic fracturing. Because "[t]he disparate treatment of functionally indistinguishable products is the essence of the meaning of arbitrary and capricious," BLM's approach violates the APA. *Bracco Diagnostics, Inc. v. Shalala*, 963 F. Supp. 20, 28 (D.D.C. 1997) (citing *Indep. Petroleum Ass'n of Am. v. Babbitt*, 92 F.3d 1248, 1260 (D.C. Cir. 1996)). *See also Transactive Corp. v. United States*, 91 F.3d 232, 237 (D.C. Cir. 1996) (holding Department of Treasury's unexplained decision to apply different disbursement rules to fundamentally similar electronic funds management programs was arbitrary and capricious); *Olenhouse*, 42 F.3d at 1582 (finding regulations were arbitrary and capricious because the regulations treated rain-induced late planting "beyond the Farmers' control" for the purpose of assigning a disaster credit but regarded the late planting as "within their control" for the purpose of calculating yield reductions).

In the regulatory preamble to the rule, BLM suggests that when submitting information to the agency, an operator "may segregate the information it believes is a trade secret, and explain and justify its request that the information be withheld from the public." 80 Fed. Reg. at 16,173.

The plain language of the final rule itself, however, is much more limited than BLM implies in the preamble. The provision that allows operators to withhold information from disclosure, 43 C.F.R. § 3162.3-3(j), applies only to the information that an operator is required to submit under paragraph (i) of Section 3162.3-3. *See* 43 C.F.R. § 3162.3-3(j) (establishing procedure to assert exemption from disclosure “[f]or information required in paragraph (i) of this section”). Paragraph (i) is the provision that identifies the “[i]nformation that must be provided to the authorized officer after hydraulic fracturing is completed,” i.e., the information in the post-hydraulic fracturing completion report. 43 C.F.R. § 3162.3-3(i). There is no analogous provision in the final rule that provides a method for operators to withhold information that the rule requires to be submitted before hydraulic fracturing operations or in any other reporting associated with development activities.¹⁵

BLM provides no explanation for drawing a distinction between pre- and post-hydraulic fracturing information. BLM acknowledges receiving comments that information required in the pre-hydraulic fracturing reports represents confidential information.¹⁶ Yet BLM responds only

¹⁵ Not only will this information be collected, BLM acknowledges that “[i]nformation that would be required to be submitted as part of this rule will be made available to the public, consistent with the requirements of Federal Law.” 80 Fed. Reg. at 16,182.

¹⁶ *See, e.g.*, A.R. at DOIAR0056262, Pub. Cmt., IPAA (emphasizing that operators consider geologic information and well completion design plans to be trade secrets and asserting that the rule’s withholding mechanism is insufficient “because the cross-references in the exemption provision indicate that claims can only be made for information submitted following the hydraulic fracturing operation”); *id.* (requesting an analogous provision be added allowing operators to seek protection “for information required to be included with the Notice of Intent Sundry requesting approval of a hydraulic fracturing operation”); *id.* at DOIPS0365294, Pub. Cmt., Devon (observing that “[s]ubmitting [fracture extent] information to the BLM, and therefore making it available to the public, would render the intellectual property value of the information nil” and requesting that, “[s]hould this requirement be retained in a Final Rule, the BLM should allow a mechanism in the rule that ensures that this information, if submitted, is held confidentially”); *id.* at DOIPS0179035, Pub. Cmt., Encana (explaining that submission of fracture mapping “could also undercut an individual company’s competitive advantage by publicly providing insight into well designs and prospective geology”); *id.* at DOIPS0364932, Pub. Cmt., Noble Energy, Inc. (“Noble”) (Aug. 23, 2013) (stating that “[t]he proposed rule affords trade secret protection . . . only to information that would be submitted after a hydraulic fracturing operation” and requesting that “BLM expand the trade secret provisions to information required to be submitted in the Notice of Intent Sundry, such as fracture length and

that “BLM believes that the submission of these estimated values would not routinely meet any of the criteria within the Freedom of Information Act regulations (43 CFR part 2) which would require such information to be held as confidential information.” 80 Fed. Reg. at 16,1654. BLM provides no explanation of the reasoning it employed to reach this conclusion or the bases for its belief. This alone is reason to set aside BLM’s rule. Although BLM “is not required to discuss every item of fact or opinion included in the submissions it receives . . . , it must respond to those comments which, if true, would require a change in the proposed rule.” *La. Fed. Land Bank Ass’n, FLCA v. Farm Credit Admin.*, 336 F.3d 1075, 1080 (D.C. Cir. 2003) (internal citation and quotations omitted).

BLM’s belief finds no support in law. The Freedom of Information Act, 5 U.S.C. § 552 (“FOIA”), contains nine exemptions that protect specific categories of information from disclosure. *See* 5 U.S.C. § 552(b). Contrary to BLM’s unsupported conclusion that FOIA’s exemptions will not be implicated under the final rule, at least two of those exemptions apply here.

The final rule requires operators to submit, among other information: (i) detailed information “regarding wellbore geology” including “a geologic description, and the estimated depths (measured and true vertical) to the top and bottom of the formation into which hydraulic fracturing fluids are to be injected,” 43 C.F.R. § 3162.3-3(d)(1)(i); (ii) the estimated depths to the

orientation data”); *id.* at DOIPS0365626, Pub. Cmt., Ultra Petroleum (Aug. 23, 2013) (stating that “[t]he proposed rule affords trade secret protection . . . only to information that would be submitted after a hydraulic fracturing operation” and requesting that “BLM expand the trade secret provisions to information required to be submitted in the Notice of Intent Sundry, such as fracture length and orientation data”); *id.* at DOIPS0301588, Pub. Cmt., ANGA (observing that “[s]ubmitting [fracture extent] information to the BLM, and therefore making it available to the public, would render the intellectual property value of the information nil” and requesting that, “[s]hould this requirement be retained in a Final Rule, the BLM should allow a mechanism in the rule that ensures that this information, if submitted, is held confidentially”).

top and bottom of confining zones and all occurrences of usable water, *see* 43 C.F.R. § 3162.3-3(d)(1)(ii)-(iii); and (iii) a “map showing the location, orientation, and extent of any known or suspected faults or fractures within on-half mile (horizontal distance) of the wellbore trajectory that may transect the confining zone(s).” 43 C.F.R. § 3162.3-3(d)(2). This information falls squarely within the plain language of FOIA’s Exemption 9, a provision that protects from disclosure “geological and geophysical information and data, including maps, concerning wells.” 5 U.S.C. § 552(b)(9). Exemption 9 recognizes that “disclosure of seismic reports and other exploratory findings of oil companies would give speculators an unfair advantage over the companies which spent millions of dollars in exploration.” *Black Hills Alliance v. U.S. Forest Serv.*, 603 F. Supp. 117, 122 (D.S.D. 1984) (quoting H.R.Rep. No. 1497, 89th Cong.2d Sess. 11 (1966), U.S. Code Cong. & Admin. News 1966, p. 2418, *reprinted in* Freedom of Information Act Source book: Legislative Materials, Cases, Articles, Subcomm. on Admin. Practice & Procedure of the Comm. on the Judiciary, 93d Cong. 2d Sess. 32 (1974)). BLM’s regulatory preamble makes no reference to Exemption 9 or to case law applying the exemption to protect as confidential the type of geological information BLM seeks to collect and publish in the final rule. *See Starkey v. U.S. Dep’t of the Interior*, 238 F. Supp. 2d 1188, 1196 (S.D. Cal. 2002) (applying Exemption 9 to exempt from disclosure information in table and narrative form related to ground water inventories, well yields, and the thickness of a particular formation).

BLM also fails to account for Exemption 4, a provision that protects “trade secrets and commercial or financial information obtained from a person that is privileged or confidential.”¹⁷

¹⁷ Like Exemption 4, the federal Trade Secrets Act prohibits the disclosure of information that “concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association.” 18 U.S.C. § 1905. In applying the broad language of the Trade Secrets Act, the federal courts have

5 U.S.C. § 552(b)(4). BLM acknowledges that the “final rule will add to existing requirements by providing information to the BLM and the public on the location, geology, water resources, location of other wells or fracture zones in the area, and fracturing plans for the operation before the well is permitted.” 80 Fed. Reg. at 16,130. Because the operational and design information that BLM’s final rule requires oil and gas operators to disclose falls squarely within the categories of information that Exemption 4 protects, BLM’s approach is directly contrary to law.

The federal courts recognize that Exemption 4 “protects persons who submit financial or commercial data to government agencies from the competitive disadvantages which would result from its publication.” *Nat’l Parks & Conservation Ass’n v. Morton*, 498 F.2d 765, 768 (D.C. Cir. 1974). *See also Herrick v. Garvey*, 298 F.3d 1184, 1193 (10th Cir. 2002) (“The purpose of Exemption 4 is “to protect the confidentiality of information which is obtained by the Government ..., but which would customarily not be released to the public by the person from whom it was obtained.”) (quoting *Critical Mass Energy Project v. Nuclear Regulatory Comm’n*, 975 F.2d 871, 877 (D.C. Cir. 1992)). And when the submission of that information is involuntary, “the information is protected from disclosure by FOIA if disclosure will either: “[i]mpair the government’s ability to obtain necessary information in the future or [ii] cause

looked to the scope of Exemption 4; to determine whether Section 1905 prohibits any particular disclosure, the Court must first determine whether the information falls within Exemption 4. *See* U.S. Dep’t of Justice, Freedom of Information Act Guide (May 2004) (quoting 5 U.S.C. § 552(b)(4)), available at: http://www.justice.gov/oip/foia-guide-2004-edition-exemption-4#N_1_. *See also Gen. Motors Corp. v. Marshall*, 654 F.2d 294, 297 (4th Cir. 1981) (characterizing the scope of Section 1905 and Exemption 4 as “the same” and “coextensive” and concluding that “material qualifying for exemption under [Exemption 4] falls within the material, disclosure of which is prohibited under [Section] 1905”). If material would qualify for protection under Exemption 4, an agency must prohibit public disclosure. The Department of Justice has recognized that Section 1905 “stands as a potent barrier to the disclosure of any information that falls within the protection of Exemption 4.” U.S. Dep’t of Justice, Discretionary Disclosure & Exemption 4 (1985), available at: <http://www.justice.gov/oip/blog/foia-update-oip-guidance-discretionary-disclosure-and-exemption-4>. The Supreme Court has explained that disclosures violating Section 1905 are “not in accordance with law” within the meaning of the APA, 5 U.S.C. § 706(2)(A). *See Chrysler Corp. v. Brown*, 441 U.S. 281, 318 (1979).

substantial harm to the competitive position of the person from whom the information was obtained.” *Utah v. U.S. Dep’t of Interior*, 256 F.3d 967, 969 (10th Cir. 2001).

To satisfy this second prong, all Petitioners need show “is actual competition and the likelihood of substantial competitive injury.” *Id.* at 970. The existence of competition is easily satisfied here. The compilation of geologic data and the development of technical plans for extracting resources from that geology is the very essence of how oil and gas companies compete. Geologic assessments identifying the location and accessibility of oil and gas deposits represent oil and gas companies’ most closely held commercial information and form the framework for all operators’ decisions regarding where to invest and the tools and strategies used to explore for and develop specific assets.

Nor is the potential of competitive injury in doubt. The final rule requires, as part of an operator’s request for authorization to conduct hydraulic fracturing activities, that the operator submit “[a] map showing the location, orientation, and extent of any known or suspected faults or fractures within one-half mile (horizontal distance) of the wellbore trajectory that may transect the confining zone(s).” 43 C.F.R. § 3162.3-3(d)(2). To the extent that this information is available at all,¹⁸ it is closely held and confidential. Operators would not willingly share this information with offset operators who did not participate in the time and expense of a seismic shoot required to obtain this data. That is because this geological understanding influences the

¹⁸ The mapping information that BLM requests will only be available in circumstances where seismic mapping has been conducted. Seismic analyses constitute intensive surveys that cannot be conducted on every well; these surveys are normally run in the early phase of field development, and on only a few wells, to help calibrate the drainage area and evaluate the most effective spacing between wells. When seismic mapping has not been conducted, operators will not be able to produce maps, except along well-mapped, well-known faults and fault structures where information has already been published publicly. Under these conditions, BLM will already have access to the same publicly available geologic information as operators. But because no data sharing center for seismic information on federal lands exists, Petitioners expect that publicly available seismic information exist only a very small percentage of federal and Indian lands.

productivity of development and the value of regional assets. When operators drill wells in a less favorable direction, for example, those wells may not perform optimally and that inferior well performance may motivate decisions to re-assign resources to other locations, to sell acreage to competitors, or to enter cooperative operating or farmout agreements.

And direction is only one feature of an operator's extraction plan. The design and details of hydraulic fracturing plans have a substantial effect on the recoveries that oil and gas operators can achieve. The final rule will require that operators submit significant aspects of these plans: (i) the volume of fluid to be used; (ii) the pressure that will be applied; (iii) the trajectory in the wellbore into which hydraulic fracturing fluids are to be injected; (iv) the direction and length of the fractures that will be propagated; and (v) the depth of perforations. *See* 43 C.F.R. § 3162.3-3(d)(4). Companies spend millions of dollars annually in research and development to formulate designs that maximize recovery, reduce operational costs, and minimize environmental impact. The features of a hydraulic fracturing plan, and the ability to adjust those features in a manner that promotes operational objectives, are what separate oil and gas producers from their competition. Making those features public and accessible to competitors will undermine the value of that ability and dilute the investment of producers who are constantly striving to extract oil and gas with less waste, less costs, and more environmental sensitivity.

This impact on producers' investment is sufficient alone to invoke Exemption 4's protection. To show that disclosure threatens to injure a competitor, the Court "need not conduct a sophisticated economic analysis of the likely effects of disclosure." *Utah*, 256 F.3d at 970 (quoting *Pub. Citizen Health Research Grp. v. Food & Drug Admin.*, 704 F.2d 1280, 1291 (D.C.Cir.1983)). "Although '[c]onclusory and generalized allegations of substantial competitive

harm ... are unacceptable and cannot support an agency's decision to withhold requested documents,' *actual* economic harm need not be proved; evidence demonstrating the existence of potential economic harm is sufficient." *Utah*, 256 F.3d at 970. BLM's rule, which requires public disclosure of information that operators keep confidential to gain an advantage over competitors, satisfies that standard.

Information is not public simply because the government wishes to collect it. Despite detailed explanatory comments in the administrative record, BLM's final rule fails to account for the confidential nature of the information the rule requires to be disclosed or the commercial consequences of that disclosure. Because BLM's rule requires public disclosure of highly confidential and commercially valuable information, the rule is contrary to federal public records law and cannot be sustained.

E. THE RECOVERED FLUIDS STORAGE REQUIREMENTS ARE NOT RATIONALLY STRUCTURED.

The final rule requires that "all fluids recovered *between* the commencement of hydraulic fracturing operations and the authorized officer's approval of a produced water disposal plan under BLM requirements must be stored in rigid enclosed, covered, or netted and screened above-ground tanks." 43 C.F.R. § 3162.3-3(h) (emphasis added). But no regulatory mechanism exists for the "approval of a produced water disposal plan" on an individual well basis. BLM has provided no explanation how the limitations applicable to recovered fluids storage can apply when the administrative approval process on which those limitations are based does not exist. And even if the storage requirement was enforceable, BLM has not accounted for extensive comments in the record detailing the economic and environmental impacts of limiting operators to the use of small tanks for recovered fluid storage.

1. The Recovered Fluids Storage Requirements are Inapplicable.

Under Onshore Order No. 7, BLM approves a “disposal method” — whether by injection, storage in long-term pits, or other method including treatment and recycling — in association with the permitting of “disposal facilities” on a lease basis. Onshore Oil and Gas Order No. 7, Disposal of Produced Water § III.B, 58 Fed. Reg. 47,354-01, 47,362-63 (Sept. 8, 1993). Assuming that fluids recovered from a hydraulically fractured well are to be ultimately disposed of in accordance with a method and in a facility that has previously been approved under Onshore Order No. 7, e.g., in a previously approved injection well consistent with the terms of an authorized Underground Injection Control permit, there is no time “between the commencement of hydraulic fracturing operations and the authorized officer’s approval of a produced water disposal plan.” 43 C.F.R. § 3162.3-3(h).

BLM conceded at the preliminary injunction stage that, when an operator’s disposal method and disposal facility have been approved under Onshore Order No. 7, the provision of the final rule requiring recovered fluids stored at the well site be held in above-ground tanks is “inapplicable.”¹⁹ Resp’ts’ Br. in Opp’n to Pet’rs’ Mot. for Prelim. Inj. at 20-21, No. 2:15-CV-00041-SWS, filed June 1, 2015 (ECF No. 20) (“Gov’t’s Resp.”). BLM recognizes that “Onshore Order 7 generally applies to all recovered fluids, including those fluids recovered immediately after hydraulic fracturing,” and acknowledges that, “[u]nder Onshore Order 7, section III.a, an operator has permission to temporarily dispose produced water from newly completed wells for up to 90 days, until an application for the disposal of produced water is approved by the

¹⁹ BLM’s concession in the agency’s moving papers is consistent with the plain language of the final rule’s storage provision. But moving papers are not controlling, and BLM’s new position appears to be inconsistent with the administrative record.

authorized officer.” 80 Fed. Reg. at 16,164. Yet at the preliminary injunction stage, BLM also contended that “BLM promulgated the temporary storage provision in the final rule for operations for which there is a gap between completion of hydraulic fracturing operations, and approval of a permanent disposal plan” and represented that “the final rule provision fills a regulatory gap in Onshore Order 7, which otherwise allows produced water to be stored in reserve pits for up to 90 days.” Gov’t’s Resp. at 20.

Nothing in the administrative record explains how a rule that could only apply during a time period that does not exist in the oil and gas permitting framework can fill any alleged “regulatory gap.” And to the extent that BLM intends to require operators whose disposal plan has previously been approved to use above-ground tanks for the temporary storage of recovered fluids at the well-site (until those fluids can be transported to the permanent disposal site), that approach would violate both the express terms of Onshore Order No. 7 and contradict BLM’s admission that the final rule is inapplicable under those circumstances. Because BLM’s admission proves that the storage requirement is not structured rationally, it should be set aside. *See RxUSA Wholesale, Inc. v. Dep’t of Health & Human Servs.*, 467 F. Supp. 2d 285, 305 (E.D.N.Y. 2006).

2. **BLM Disregarded the Environmental and Economic Costs of the Storage Tank Requirement.**

BLM estimates an average incremental cost of using tanks instead of a pit for recovered fluids storage to be \$74,400 per operation, but applies that figure to “only those operations where we do not estimate that the operator will voluntarily comply.” 80 Fed. Reg. at 16,201-02. BLM contends that “[o]perations that are most likely to incur this cost are in states where 0.8% of all oil and gas activity on public lands occurs.” *Id.* at 16,202. BLM again fails to support its

assumptions, disregarding important information in the record.

BLM has attributed no incremental costs to the tank requirement in New Mexico and Texas “based on state regulations.” *Id.* To the extent that BLM is suggesting that New Mexico and Texas do not permit storage of recovered fluids in pits, that suggestion is false. As BLM concedes, both states “allow operators to apply for permits to use pits,” *id.* at 16,199, and some operators do indeed use pits in those states. Even absent a requirement to use tanks, BLM indicates that it has assumed voluntary compliance with the tank provision “in situations where tanks would cost the same as or less than pits, and this may be largely dependent on the volume of recovered fluids expected.” *Id.* at 16,200. On this basis, BLM has: (i) attributed no incremental cost to the tank requirement in Alaska, California, South Dakota, and Utah; and (ii) assigned very limited incremental costs in other states with significant activity on public lands including Colorado, Montana, North Dakota, Oklahoma, and Wyoming.²⁰ *See id.* at 16,202.

BLM’s supposition that costs represent the dominant factor in an operator’s selection of a recovered fluids storage method disregards evidence in the record to the contrary. Petitioners have explained that an operator’s preference often “varies on a project-by-project basis, depending on a wide variety of economic, geographic, logistical, and environmental factors.” A.R. at DOIAR0056255-56, Pub. Cmt., IPAA. Although tanks are mobile and can frequently be re-used, tanks also involve large upfront costs and are subject to availability from service providers. *See id.* at DOIAR0056256.

²⁰ BLM contemplates an impact on 28.3% of operations in Colorado, 20.4% of operations in Montana, 24.9% of operations in North Dakota, 38.1% of operations in Oklahoma, and 7.7% of operations in Wyoming. *See* 80 Fed. Reg. at 16,202.

While BLM appears to have considered the rental cost of tanks and some transportation costs,²¹ its analysis omits numerous other economic and environmental factors attendant to the use of tanks. BLM provides no information about the likelihood that operations would be located in reasonable proximity to allow tanks to service multiple operations simultaneously, does not explain how BLM accounted for transportation costs between various well sites, and fails to consider whether dispersing tanks to multiple well sites simultaneously would leave enough tanks in any one place to service each individual location. To the extent there is evidence in the record related to BLM's assumption, it demonstrates that pits often present an operational advantage when servicing recovered fluids from multiple wells;²² reducing transportation risks;²³ limiting environmental impacts on well pads, roads, rights of way, and surrounding ecosystems;²⁴ and promoting water treatment and recycling.²⁵ Though commenters provided numerous examples of situations in which pits provide an operational advantage or enhanced

²¹ BLM indicates that it assumed transportation to and from the operating site will take four hours. *See* 80 Fed. Reg. at 16,201. BLM does not indicate how the agency derived this assumption. Given that operations in the western public land states are often quite far from population centers, BLM's estimate appears unreasonable.

²² *See* A.R. at DOIAR0056256 (demonstrating that pits often present an operational advantage when servicing recovered fluids from multiple wells because: (i) tanks used for the management of returned fluids typically cannot store the entire volume of fluids returned from the well; and (ii) a tank's contents must be transferred for disposal throughout the recovery period to make space for operations to continue); *id.* (explaining that a pit can generally be sized to handle the entire volume of recovered fluids, which facilitates reuse and decreases impacts on fresh water resources).

²³ *See* A.R. at DOIAR0056256, Pub. Cmt., IPAA (observing that setting, emptying, and removing tanks will also result in increased truck traffic compared to pits).

²⁴ *See* A.R. at DOIAR0056256 (explaining that tanks do not necessarily reduce the potential for leaks because manifolding tanks together involves more piping than is required to transfer fluids to and from a pit.); *id.* (noting that increased amount of piping connections poses a release threat, even with the implementation of best management practices to ensure the integrity of transfer lines); *id.* at DOIPS0365304-05, Pub. Cmt., Devon (discussing the increased costs and impacts of storing fluid in tanks compared to the benefits of pits); *id.* at DOIPS0389023, Pub. Cmt., Anadarko (Aug. 23, 2013) (explaining that ponds used to store fluids are typically "completely reclaimed in under 8 months," and noting that "use of closed tanks adds significantly to water treatment costs, tank-hauling traffic and potential spills during transport").

²⁵ *See* A.R. at DOIPS0301581, Pub. Cmt., ANGA (asserting that the "Associations' members have made significant investments in the development of recycling technologies to increase the utility of recovered fluids," observing that "[s]uch investments have also led to a reduction in the total fresh water burden, reductions in truck traffic, and reduction in surface footprint from hydraulic fracturing operations," and emphasizing that "[l]arge, open topped, storage tanks and pits are vital to the economic practicality of recycling technologies").

environmental sensitivity, there is no dispute that: (i) BLM's rule does not account for these features, *see* at DOIAR0079320, Hydraulic Fracturing Meeting Notes May 21, 2014 (admitting that final rule does not address "the number of vehicles, tanks, etc."); and (ii) BLM has not responded to any of these comments.

F. OPERATORS DO NOT HAVE INFORMATION NECESSARY TO COMPLY WITH CERTIFICATION REQUIREMENTS.

The final rule requires that operators certify, in the completion report that operators must file after conducting hydraulic fracturing on a well, that during the time hydraulic fracturing fluids were present on the lease, the fluids complied with all applicable permitting and notice requirements as well as all applicable federal, state, tribal, and local laws, rules, and regulations.²⁶ *See* 43 C.F.R. § 3162.3-3(i)(8)(ii)-(iii). When an operator requests that certain confidential information be exempted from disclosure, the operator must also certify that "the operator has been provided the withheld information from the owner of the information and is maintaining records of the withheld information, or that the operator has access and will maintain access to the withheld information held by the owner of the information." 43 C.F.R. § 3162.3-3(j)(1)(iii).

BLM acknowledges that the "common practice is for operators to engage service companies to conduct hydraulic fracturing services." 80 Fed. Reg. at 16,173. BLM understands that it is often these service companies that own the trade secrets or confidential information related to hydraulic fracturing operations. *See id.* ("[T]he operator will not always be in the best position to declare why certain information should be withheld."). Yet both the certification and

²⁶ When submitting chemical information to FracFocus, operators must also make this certification as part of the operator's submission to FracFocus. *See* 43 C.F.R. § 3162.3-3(i).

the affidavit requirements disregard comments in the record explaining that, in the oil and gas industry, trade secret holders such as service companies generally do not provide operators — who may be competitors as well as clients — with access to the trade secret holder’s trade secrets and confidential commercial information. *See* A.R. at DOIAR0090028, Pub. Cmt., Halliburton Energy Servs., Inc. (Aug. 23, 2013).²⁷ “[O]perators will never have the information necessary to know whether the fracturing fluid used on their wells complies with all applicable laws.” A.R. at DOIAR0056260, Pub. Cmt., IPAA; *see also id.* at DOIAR0056644, Pub. Cmt., API (“[T]he proposed rule asks operators to certify matters of which they may have no actual or constructive knowledge, which the operator may have little or no legal expertise or due diligence resource to evaluate, and which have no bearing on the operator’s activities or existing legal obligations.”).

Not only did commenters caution that BLM “does not adequately distinguish the roles of operators, service providers, and vendors,” A.R. at DOIPS0179037, Pub. Cmt., Encana, but BLM’s own staff emphasized that the failure to make this distinction undermined the legal validity of the final rule’s certification requirements. *See id.* at DOIAR009180, Draft Preamble (Dec. 5, 2011) (questioning “how far you can require an operator to submit Service Companies['] trade secret[s] in identifying chemical additives in their product” and cautioning

²⁷ *See also* A.R. at DOIPS0365621, Pub. Cmt., Baker Hughes (Aug. 23, 2013) (“[Service companies], rather than the operators, are most often in a position to know whether these formulations are not otherwise publicly available, are not required to be publicly available under any applicable law and are not readily apparent through reverse engineering.”); *id.* at DOIPS0393425, Pub. Cmt., Chevron (Aug. 23, 2013) (asserting that “a trade secret is [a] property right held by the owner of the information,” and that “[t]his right does not transfer to the operator”); *id.* at DOIPS0365297, Pub. Cmt., Devon (Aug. 23, 2013) (characterizing the certification requirements as “unworkable” because “BLM has improperly limited the scope of proposed § 3162.3-3(j) to apply only to ‘operators,’” overlooking that “[o]perators cannot provide affidavits containing the required affirmations on behalf of third parties”); *id.* at DOIPS0301592, Pub. Cmt., ANGA & AXPC (Aug. 23, 2013) (“Operators are not able to sign affidavits supporting claims of trade secret information, because they cannot affirm, with certainty, that information given to them by chemical providers meets the criteria enumerated in this section.”).

that “I see a major lawsuit if we are not careful in what we require”). BLM officials recognize that “[i]t’s normally not the oil companies who will not disclose the amounts in the ‘Secret Recipe,’ it’s the companies performing the actual fracturing procedure.” A.R. at DOIAR0027283, Mem. from Barney A. Whiteman, Acting Field Office Manager, Great Falls, Mont. to Fort Belknap Tribal Council.

At the preliminary injunction stage, BLM agreed that operators will often lack the information necessary to make the certifications in question, *see* Gov’t’s Resp. at 16-17, but represented that the final rule: (i) does not require operators to have “possession of, or the ability to scrutinize” information that a service provider is withholding as a trade secret, *see id.* at 17; (ii) permits assertions of confidential status to be based on the affidavit of the service provider, *id.*; and (iii) allows an operator to satisfy the requirement that more information be provided by having the service provider transmit the information directly to BLM without the operator as an intermediary, *see id.* at 17-18. While Petitioners appreciate these clarifications, the statements in BLM’s moving papers explain only how BLM will enforce the final rule, not why the BLM rejected comments that BLM should impose requirements respecting trade secrets directly on the owner of those secrets. *See, e.g.*, A.R. at DOIPS0435829, Pub. Cmt., Marathon (“Marathon Oil urges BLM to allow service and supply companies to submit their own affidavits under this subsection where they are the holders of the trade secret information.”); *id.* at DOIPS0364933, Pub. Cmt., Noble (“Foremost, service providers – not operators – should be required to submit and certify the service provider’s own data.”).

More important, none of BLM’s post-hoc clarifications allows the operator to certify that, during the time hydraulic fracturing fluids were present on the lease, the fluids complied with all

applicable permitting and notice requirements as well as all applicable federal, state, tribal, and local laws, rules, and regulations. *See* 43 C.F.R. § 3162.3-3(i)(8)(ii)-(iii). While BLM is correct that operators assume legal responsibility for the conduct of the operators' contractors on the lease site, liability does not grant operators clairvoyance to make certifications of information the operators do not possess. BLM cannot overcome its acknowledgment that the administrative record supports Petitioners' position by conflating two unrelated requirements.

G. THE CEL REQUIREMENT MUST BE BASED ON MORE THAN UNSUPPORTED ASSUMPTIONS.

Petitioners contend that BLM has significantly underestimated the costs of complying with virtually every aspect of the final rule. In this APA case, however, Petitioners' arguments are not premised on the quantitative difference between the results of Petitioners' calculations and BLM's calculations, but rather on the qualitative and procedural inadequacy of the work BLM did to reach those results. Because BLM performs its math, but does not show its work, BLM's cost estimates cannot withstand scrutiny under administrative law.

BLM's failure to account for additional casing requirements also undermines BLM's calculation of the incremental costs associated with the new requirement to run a cement evaluation log ("CEL") on intermediate casing that protects usable water, when that intermediate casing is not cemented to the surface. *See* 43 C.F.R. § 3162.3(e)(2)(ii). BLM estimates that this requirement will impose costs of \$111,200 per well, but concludes that this cost will rarely constitute an incremental burden associated with the final rule based on three assumptions: (i) operators are already required to perform this test under some states' laws; (ii) even where not required, running a CEL on intermediate casing is consistent with industry guidance; and (iii) BLM's

estimates that only five percent of wells have intermediate casing that protects usable water. *See* 80 Fed. Reg. at 16,197. Each of these assumptions lacks support in the record.

BLM's reliance on state laws is misplaced. BLM attributes zero additional costs associated with its enhanced CEL requirement for operations in Colorado, asserting that Colorado requires a CEL be conducted on intermediate casing. *See id.* But Colorado only requires a CEL when an operator uses a production liner, *see* 2 COLO. CODE REGS. § 404-317(o), and BLM offers no information on the frequency with which operators use production liners in Colorado. BLM assumes only 2.5% of wells would be impacted in Texas because "Texas specifies that the operator must identify the top of cement (with a CBL or temperature log) if it does not cement to the surface." 80 Fed. Reg. at 16,197. Texas does require that operators identify the top of cement for intermediate casing, but provides that this can be determined through calculation, a temperature survey, or a CEL. *See* 16 TEX. ADMIN. CODE § 3.13(b)(2)(A)(i)-(iii). BLM provides no information regarding the frequency that operators in Texas choose to use a CEL to satisfy this requirement. Nor does BLM offer any comparison between the relative costs of the various methods Texas allows to meet this requirement. And BLM states, without explanation, "California and Wyoming may require [a CEL] in certain circumstances." 80 Fed. Reg. at 16,197. BLM has not identified the circumstances under which California or Wyoming "may require" operators conduct a CEL on intermediate casing or provided any explanation why BLM could not determine from those states' regulations whether the states would in fact require a CEL.

BLM's suggestion that, even where state rules do not require a CEL, industry guidance counsels that operators run a CEL on intermediate casing is likewise flawed. BLM cites the

American Petroleum Institute’s Guidance document HF1 for the proposition that if cement is not circulated to surface on intermediate casing, “operators may run a CEL or other diagnostic tools to determine the adequacy of the cement integrity and that the cement reached the desired height.” 80 Fed. Reg. at 16,197. This unremarkable proposition, however, reveals nothing about the incremental costs a requirement to perform CELs on intermediate casing would impose. Guidance Document HF1 states only that, “[d]epending on the well design, it may be appropriate to run a CBL and/or other diagnostic tool(s) to determine that the cement integrity is adequate to meet the well design and construction objectives.” API HF1 § 7.4, at 12. BLM has not offered any analysis considering how frequently well design will support a need to run a CEL on intermediate casing or made any comparison between the costs of a CEL requirement and the “other diagnostic tool(s)” that industry guidance contemplates. To the contrary, BLM acknowledges that it “does not have credible data on the prevalence of voluntary compliance or the prevalence of CEL requirements as conditions of approval.” 80 Fed. Reg. at 16,197.

A lack of data condemns another aspect of BLM’s cost calculation — BLM’s assertion that, “[b]ased on field experience, the BLM anticipates that only about [five] percent of wells have intermediate casing to protect usable water.” *Id.* BLM has no evidentiary or mathematical support for this supposition. BLM’s “field experience” is based on its application of existing rules. But as discussed above, *see supra* Part III.C.2, the final rule re-assigns the burden to identify usable water from government agencies to operators and amends the method by which usable water is identified, requiring precise mathematical calculations. These modifications are likely to expand the number of wells with intermediate casing to protect this numerically-

identified “usable water.” Failing to account for this change in the final rule, BLM has no support for its assumption that the CEL requirement will affect just five percent of wells.

At the preliminary injunction stage, BLM represented that “it did not have evidence that would allow it to quantify the prevalence of voluntary use of CELs,” Gov’t’s Resp. at 40, implying that the agency had no choice but to rely on its “field experience.” Such a representation is not credible. The applicability of the CEL requirement does not pose a question of “field experience” or one that requires experts to make assumptions to resolve. BLM is in possession of the drilling records for every well ever drilled on federal lands. BLM could determine the applicability of the CEL requirement with reasonable precision simply by reviewing an appropriately sized sample of those records. And BLM has had almost five years to conduct this review and support its analysis. Having failed to do so, BLM cannot now rely on unsubstantiated speculation or the unsupported “hunch” of unnamed personnel to sustain its final rule. *Wyo. Outdoor Council*, 171 IBLA 108, 121-22 (2007) (observing that a finding of undue degradation must be based on more than speculation).

H. BLM’S ASSESSMENT OF ADMINISTRATIVE COSTS FAILS TO ACCOUNT FOR EVIDENCE IN THE RECORD.

BLM’s calculation of administrative costs is equally inadequate. Although the final rule will add an additional authorization request and decision-making process to BLM’s administrative responsibilities — i.e., yet *another* permit — BLM has assumed only de minimis values to the expense and time necessary to prepare and review applications for permission to conduct hydraulic fracturing. *See* 80 Fed. Reg. at 16,196 (calculating an incremental cost of \$643 per application and assuming only 8 hours of preparation time and 4 hours of review time). BLM’s extraordinarily low estimate is presumably based on the BLM’s assumption that BLM

“fully expects to process requests for hydraulic fracturing concurrently with the processing of drilling applications.” *Id.* at 16,186. BLM concedes that, “[i]f an operator submits a request [to conduct hydraulic fracturing] in an NOI, . . . further processing time should be expected,” and recognizes that “delays in approvals of operations can be costly to operators.” *Id.* at 16,177.

BLM has not presented any explanation, however, supporting the basis for the agency’s assumption that an operator is likely to submit a request for authorization to conduct hydraulic fracturing at the time an operator submits an APD. And to the extent that there is evidence in the record relevant to this assumption, such evidence suggests the opposite conclusion. There is substantial evidence in the record documenting operators’ frustration with, and BLM’s awareness of, administrative delays attendant to development on federal and Indian lands. *See* A.R. at DOIAR0078785, Internal Working Document, Diane Rhem [sic] Show Background: Fed. Land Mgmt. & BLM Energy Prod. on Pub. Lands (May 11, 2014) (stating that in FY2013, “it took an average of 194 days to process an APD, down from 228 in 2012, and faster than any time since 2005”); *id.* at DOIAR0028197, E-mail from Benjamin A. Nussdorf, Senior Counselor, Mineral & Realty Mgmt. to Robyn Shoop (Sept. 4, 2012) (“A number of commenters have brought up BLM delays and inexperience.”); *id.* at DOIAR0056224, Pub. Cmt., IPAA (documenting delays between receipt of an APD and approval of the APD in eleven BLM field offices).

Given that there are often many months, if not years, between the time an APD is submitted and the time BLM approves the APD, it is rare that an operator will have all the information related to hydraulic fracturing that the final rule requires at the time an APD is submitted. It is not uncommon for significant aspects of the hydraulic fracturing design to

change during that period because of changes in, among other factors, commodity prices, material availability, vendor availability, and geological information acquired during the drilling and logging process. Designs can also change based on what an operator has learned from developing other nearby wells — information that is not always available at the time an APD is submitted. And designs can change based on information gathered from drilling the well itself, which by definition occurs after the APD is approved. Because BLM’s economic analysis fails to account for any of these considerations and is based on unsupported assumptions, its assessment of administration costs underestimates the administrative burden the final rule will impose on operators and the agency itself, and must be set aside.

Even more troubling is BLM’s acknowledgement that the problem of delinquent permit processing will be exacerbated under the final hydraulic fracturing rule. BLM estimates that the “review of information associated with the application, subsequent report, remedial action report (when applicable), and variance request (when applicable) will pose an additional workload to the BLM of about 25,400 hours per year.” 80 Fed. Reg. at 16,207. And while BLM has offered conclusory statements rejecting commenters’ concerns that BLM does not have the staffing, budget, or expertise to administrate the rule, *see id.* at 16,177, BLM officials concede that, given the combination of increases in workload associated with the hydraulic fracturing rule and reductions in the agency budget, “getting the work done could be an issue.” A.R. at DOIAR0009106, E-mail from James V. Scrivner, Deputy State Dir., Energy & Minerals, Cal. State Office to Steven Wells (Dec. 20, 2011).

BLM’s approach disregards the admonitions of agency leaders that BLM does not have the expertise in the field to administer the rule. *See* A. R. at DOIAR0009166, Cmts. from Wesley

W. Ingram, Supervisory Petroleum Engineer, Carlsbad Field Office (observing that “[n]one of the engineers in the Carlsbad Field Office have designed a frac job and probably only one has even been on location for a frac”). Nor does BLM’s approach consider the impact that shifting resources to administer the hydraulic fracturing rule might have on BLM’s ability to meet the agency’s other responsibilities. *See* A.R. at DOIAR0009170, Mem. from Jerry Stranahan, Branch Chief, Fluid Minerals, Colo. State Office to Steven Wells (Dec. 22, 2011) (expressing concern “that the bulk of this rulemaking is duplicative of State of Colorado processes and procedures and that the time spent on these reviews will negatively impact [the BLM Colorado State Office’s] work that cannot be duplicated by other agencies or the state”). BLM’s flippant consideration of the administrative costs the final rule will impose are not sustainable when BLM has neither articulated any plan for how the agency intends to meet its administrative responsibilities under the final rule nor described how BLM will allocate resources to ensure that application of the rule does not cause operational delays.²⁸

I. BLM LACKS JURISDICTION TO REGULATE HYDRAULIC FRACTURING.

The Property Clause of the United States Constitution affords Congress “Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States,” U.S. Const., art. IV, cl. 2. Congress’ control over federal property, however, “does not place the exclusive control of the federal public domain in the United States Government.” *Tex. Oil & Gas Corp. v. Phillips Petroleum Co.*, 277 F. Supp. 366, 368 (W.D. Okla. 1967). The Property Clause “only confers this power on Congress and leaves to

²⁸ Though BLM has suggested that “revisions made from the supplemental rule to final rule would reduce the amount of staff time required to implement the rule and limit any permitting delays,” 80 Fed. Reg. at 206, BLM has not compared the administrative burden of implementing the final rule to the burden attendant to implementing the rules actually in place at this time.

Congress the determination of when and where and to what extent this power will be exercised.” *Id.* “Although the Constitution empowers Congress to regulate federal lands, Congress determines whether or not to exercise this power.” *Kirkpatrick Oil & Gas Co. v. United States*, 675 F.2d 1122, 1124 (10th Cir. 1982) (internal citation omitted).

Congress has twice addressed the federal government’s power to regulate hydraulic fracturing on federal lands. First in 1974, Congress authorized EPA to exercise regulatory power over hydraulic fracturing. Roughly thirty years later, Congress revoked that authority from EPA. In sharp contrast, Congress has never explicitly empowered BLM with regulatory authority over hydraulic fracturing. Yet without that power, BLM’s hydraulic fracturing rule exceeds BLM’s jurisdiction and must be set aside.

Congress enacted the Safe Drinking Water Act of 1974 (“SDWA”), Pub. L. No. 93-523, 88 Stat. 1660, to “(1) authorize the Environmental Protection Agency to establish Federal standards for protection from all harmful contaminants, which standards would be applicable to all public water systems, and (2) establish a joint Federal-State system for assuring compliance with these standards and for protecting underground sources of drinking water.” H.R. Rep. No. 93-1185 (1974), *as reprinted in* 1974 U.S.C.C.A.N. 6454, 6455. To implement protection for underground sources of drinking water, Congress established a cooperative federalism scheme to regulate all underground injection of contaminants in Part C of the SDWA. *See* Pub. L. No. 93, 523, pt. C, 88 Stat. 1660, 1674-80 (codified at 42 U.S.C. §§ 300h – 300h-8). Under Part C, states can submit underground injection control (“UIC”) programs for EPA’s approval; once EPA approves such a program, primary regulatory jurisdiction over underground injection rests with

the state.²⁹ See 42 U.S.C. §§ 300h – 300h-8.

The essence of UIC programs under Part C is the prohibition of “any underground injection” without a permit. 42 U.S.C. § 300h(b)(1)(A), (C). The SDWA defines “underground injection” as “the subsurface emplacement of fluids by well injection.” 42 U.S.C. § 300(h)(d)(1). This broad definition reflects Congress’ intention to cover a wide range of municipal, industrial, and energy extraction injection activity.

[U]nderground injection of contaminants is clearly an increasing problem. Municipalities are increasingly engaging in underground injections of sewage, sludge, and other wastes. Industries are injecting chemicals, byproducts, and wastes. *Energy production companies are using injection techniques to increase production* and to dispose of unwanted brines brought to the surface during production. Even government agencies, including the military, are getting rid of difficult to manage waste problems by underground disposal methods. Part C is intended to deal with all of the foregoing situations insofar as they may endanger underground drinking water sources.

H.R. Rep. No. 93-1185, 1974 U.S.C.C.A.N. at 6481 (emphasis added). Pertinent here, Congress understood that “any underground injection” included energy companies’ use of injection techniques both to stimulate increased production and to dispose of fluids recovered during the extraction process. See *id.* at 6483 (emphasizing that Congress “intended [the definition] to cover, among other contaminants, the injection of brines and the injection of contaminants for extraction or other purposes”). The SDWA’s legislative history makes clear that Congress

²⁹ Part C requires that every federal agency “engaged in any activity resulting, or which may result in, underground injection which endangers drinking water” to comply with the UIC program. 42 U.S.C. § 300j-6(a)(4). Congress intended this provision to force “each Federal agency with jurisdiction over underground injection activities to comply with requirements of applicable underground injection control programs” and to ensure that state or federal regulators will treat “underground injection wells on Federal property the same as any other . . . underground injection well and will enforce applicable regulations to the same extent and under the same procedures.” H.R. Rep. No. 93-1185 at 574, 1974 U.S.C.C.A.N. at 6494. Where a state has earned primary jurisdiction for a UIC program, therefore, even federal agencies may not evade the state’s jurisdiction over underground injection on federal lands within the state’s borders. Petitioners note that most oil and gas producing states, including all four state petitioners in this lawsuit, exercise primary enforcement authority for injection wells associated with oil and gas production. See Mary Tiemann & Adam Vann, Cong. Research Serv., R41760, *Hydraulic Fracturing and Safe Drinking Water Act Regulatory Issues* 15 (2015).

crafted Part C to regulate injection techniques energy companies use to increase production, including hydraulic fracturing. *See Legal Envtl. Assistance Found., Inc. v. EPA*, 118 F.3d 1467, 1474-75 (11th Cir. 1997) (“*LEAF I*”).

Despite this Congressional directive to regulate hydraulic fracturing, EPA arguably failed to do so. In *LEAF I*, the Legal Environmental Assistance Foundation challenged EPA’s approval of Alabama’s UIC program, arguing Alabama’s program was ineligible for approval because the program failed to address hydraulic fracturing. *See* 118 F.3d at 1469-72. EPA defended its approval of the state UIC program, contending that hydraulic fracturing did not fall within the regulatory definition of “underground injection” and that oil and gas production wells were not required to be regulated under UIC programs because the “principal function of these wells is not the underground emplacement of fluids.” *Id.* at 1471.

The Eleventh Circuit disagreed. Looking to the dictionary definition of “injection,”³⁰ the Eleventh Circuit observed that “[t]he process of hydraulic fracturing obviously falls within this definition, as it involves subsurface emplacement of fluids by forcing them into cavities and passages in the ground through a well.” *Id.* 1474-75 (footnotes omitted). The Eleventh Circuit explained that EPA could not “exclude from the reach of the regulations an activity (i.e., hydraulic fracturing) which unquestionably falls within the plain meaning of the definition” of underground injection merely because “the well that is used to achieve that activity is also used—even primarily used—for another activity (i.e., methane gas production).” *Id.* at 1475. Because “Congress directed EPA to regulate ‘underground injection’ activities, not ‘injection

³⁰ “[W]e readily find that the word ‘injection’ means the act of ‘forcing (a fluid) into a passage, cavity, or tissue.’” *LEAF I*, 118 F.3d at 1474 (quoting *The Random House Dictionary of the English Language* 983 (2d ed. Unabridged 1987)).

wells,” the Eleventh Circuit concluded that hydraulic fracturing fell squarely within the scope of the regulatory authority Congress endowed to EPA in the SDWA. *Id.*

Responding to the Eleventh Circuit’s holding in *LEAF I* and EPA’s preparations to exercise its previously neglected regulatory authority over hydraulic fracturing under the UIC program, Congress amended the SDWA by passing the Energy Policy Act of 2005. See Pub. L. No. 109-58, § 322, 119 Stat. 594 (2005). The amendment excluded from the definition of “underground injection” in the UIC program “the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.” 42 U.S.C. § 300h(b)(2)(B). Opponents of the Energy Policy Act noted that Congress’ removal of “hydraulic fracturing for oil and gas production activities” from the definition of “underground injection” was done with the intention that this removal would “eliminate[] existing statutory authority under SDWA to ensure that hydraulic fracturing does not endanger underground sources of drinking water.” H.R. Rep. No. 109-215, at 490 (2005) (dissenting views). By enacting the Energy Policy Act, Congress specifically and unequivocally took away the only power to regulate hydraulic fracturing that it had ever granted to any federal agency on federal lands. See Hannah Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil & Gas Prod. and the Need to Revisit Regulation*, 20 Fordham Envtl. L. Rev. 115, 145 (2009) (summarizing that the Energy Policy Act “conclusively withdrew [hydraulic fracturing] from the realm of federal regulation” and observing that, although its passage was controversial, “the Energy Policy Act remains” and “[a]s such, . . . control [over hydraulic fracturing] lies in the states”).

As the legislative history and subsequent court interpretations make clear, Congress

empowered EPA to regulate hydraulic fracturing through Part C of the SDWA. After EPA failed to exercise that regulatory power, Congress revoked EPA's authority. The general statutes under which BLM grasps for regulatory authority over hydraulic fracturing simply cannot provide a backdoor for BLM to regulate in a space where Congress has specifically revoked regulatory authority from the federal government. Congress has not authorized BLM to regulate hydraulic fracturing on federal or tribal lands. *United States v. Estate of Romani*, 523 U.S. 517, 532 (1998) (holding that a later, specific, and more comprehensive statute trumped earlier, general statutes, particularly where Congress made its intent clear in the later statute); *In re Gledhill*, 76 F.3d 1070, 1078 (10th Cir. 1996) ("We reject State Bank's broad reading of Rule 7001(7) because it falls afoul of the fundamental tenant of statutory construction that a court should not construe a general statute to eviscerate a statute of specific effect."). Because BLM's hydraulic fracturing rule attempts to exercise authority Congress has not granted the agency, the rule must be set aside. *See* 5 U.S.C. § 706(2)(C).

IV. CONCLUSION.

Ignoring comprehensive comments in the record detailing the technical and legal problems of earlier proposals, BLM has arbitrarily issued a rule that lacks justification, cannot be administered technically, exceeds the agency's regulatory authority, and violates federal law. BLM's misunderstanding of numerous technical aspects of oil and gas production, as well as the agency's failure to properly account for the final rule's economic consequences undermines the procedural legitimacy of the rulemaking. Requiring oil and gas operators to comply with these unsustainable regulations would impose costs that cannot be recovered and discourage development that would benefit the public, without any demonstrable environmental or

administrative benefits. Because both the substance and procedural history of the final hydraulic fracturing rule violate the APA, the Court should set aside the rule.

Submitted respectfully this 4th day of March, 2016,

/s/ Mark S. Barron

Mark S. Barron
L. Poe Leggette
Alexander K. Obrecht
BAKER & HOSTETLER LLP
1801 California, Suite 4400
Denver, Colorado 80202-5835
Telephone: 303.764.4020
Facsimile: 303.861.7805
pleggette@bakerlaw.com
mbarron@bakerlaw.com
aobrecht@bakerlaw.com

*Attorneys for Petitioners Independent Petroleum
Association of America & Western Energy Alliance*

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing brief is double-spaced and utilizes a proportionally spaced 12-point Times New Roman typeface. The brief comprises a total of 17,657 words.

/s/ Mark S. Barron

Mark S. Barron

CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of March, 2016, a copy of the foregoing **OPENING MEMORANDUM ON THE MERITS** was electronically filed with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to all counsel of record.

/s/ Susan Quinn

Susan Quinn