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UNITED STATES DISTRICT COURT DISTRICT OF WYOMING

STATE OF WYOMING, et al.) 2:15-CV-00043-SWS [Lead]
Petitioners,)
v.	[Consolidated With 2:15-CV-00041]
UNITED STATES DEPARTMENT OF)
THE INTERIOR, et al.) Assigned: Hon. Scott W. Skavdahl
)
Respondents,) RESPONDENT-INTERVENORS'
) ADMINISTRATIVE RECORD
SIERRA CLUB, et al.) CITATIONS IN OPPOSITION TO
) PRELIMINARY INJUNCTIVE RELIEF
Respondent-Intervenors.)

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INTRODUCTION

Pursuant to the Court's June 23 and 24, 2015 Orders, Respondent-Intervenors Sierra Club et al. (collectively, the Citizen Groups) respectfully submit citations to the administrative record in support of their position opposing entry of a preliminary injunction preventing implementation of the Bureau of Land Management's (BLM) new rule addressing Oil and Gas, Hydraulic Fracturing on Federal and Indian Lands, 80 Fed. Reg. 16128 (Mar. 26, 2015) (codified at 43 C.F.R. pt. 3160) (the Rule). These citations are based on the Citizen Groups' preliminary review of the administrative record filed August 28, 2015.

The citations below are provided in two sections. First, record references addressing the merits are organized according to the order of arguments presented in the preliminary injunction motion of Petitioners Independent Petroleum Association of America and Western Energy Alliance (collectively, the Associations). Pp. 1-40, <u>infra</u>. Second, the Citizen Groups provide additional references relevant to the other requirements for injunctive relief (irreparable harm, the balance of equities, and public interest). Pp. 40-46, <u>infra</u>. The sections below do not offer new arguments, but they reference and summarize the arguments previously made in the preliminary injunction briefs (and at the June 23 hearing) so that the relevance of the record citations to those arguments can be understood.

LIKELIHOOD OF SUCCESS ON THE MERITS

I. THE ARGUMENT THAT THE RULE IMPOSES REQUIREMENTS THAT ARE IMPOSSIBLE TO MEET

The Associations' lead argument is that the BLM Rule imposes several requirements that are "impossible" to comply with and thus arbitrary and capricious. These include:

- (a) post-well completion certification requirements;
- (b) requirements for the use of tanks instead of pits; and

(c) the requirement for mechanical integrity tests.

Dkt # 13 at 8-16. The record does not support the Associations' argument. 2

A. Compliance With The Rule's Certification Requirements

The Associations argue that the Rule's operator certification requirements for post-completion reports are impossible because they involve alleged trade secret information held by service providers. Dkt # 13 at 8-11. As explained in BLM's response brief, the Rule does not require operators to have possession of allegedly proprietary information held by service companies. Instead, the service company itself can provide the necessary information substantiating the trade secret claim, and the operator and service company can agree that the service company will maintain the information and make it available as required by the Rule. Dkt # 20 at 15-19; 80 Fed. Reg. at 16221 (43 C.F.R. § 3162.3-3(j)). There is nothing impossible about this arrangement – in fact, existing BLM regulations already impose similar requirements. Dkt # 20 at 18-19.³

The preamble to the Rule includes explanation supporting BLM's position. 80 Fed. Reg. at 16159, 16173-174.

¹ Citations to the Associations' preliminary injunction briefs (Dkt ## 13, 42) and the responses by BLM (Dkt #20) and the Citizen Groups (Dkt # 34) refer to docket numbers in Case No. 2:15-cv-00041-SWS. Other references are to docket entries in Case No. 2:15-cv-00043-SWS (the Lead Case).

² The Associations couch their arguments about arbitrary and capricious requirements as violations of as the Federal Land Policy and Management Act (FLPMA), the Energy Policy Act of 2005, and other laws. Dkt # 13 at 6-27. BLM points out that the Associations "ignore[] or misinterpret[] the governing statutes" and thus their allegations of arbitrary and capricious action fail to state a cause of action or show a likelihood of success on the merits. Dkt # 20 at 8-14.

³ As BLM pointed out, even if companies must include a new provision in their contracts obligating service providers to comply with these provisions, that does not make the Rule "impossible" or unlawful. Dkt # 20 at 17 n. 7; see also, 80 Fed. Reg. at 16173.

⁴ The Federal Register notice publishing the final Rule and its preamble are in the administrative record at DOIAR0101929.

B. The Requirement To Use Tanks Instead Of Pits For Interim Fluids Storage

The Associations contend that the Rule's requirement to use tanks instead of pits for all fluids recovered between commencement of hydraulic fracturing operations and the approval of a produced water disposal plan is "impossible" because "it is unclear whether this rule would ever apply." Dkt # 13 at 11. That argument, however, is based on the prediction that many operators will circumvent the tank requirement. <u>Id.</u> at 11-12. If that occurs, it does not make the requirement "impossible" – just inapplicable to many operations. <u>See</u> Dkt # 20 at 19-21 (BLM brief); Dkt # 34 at 20 n. 12 (Citizen Groups' brief).

The administrative record includes references showing that many companies already use tanks. See pp. 35-38, infra (BLM cost estimates on tank requirement).

C. The Requirement For A Mechanical Integrity Test

The Associations assert that BLM has not adequately defined what it means by "mechanical integrity test" (MIT), and point to varying methods that have been approved for confirming mechanical integrity in different contexts. Dkt # 13 at 12-16. As explained by BLM in its preliminary injunction brief (Dkt # 20 at 21-23), the text of the Rule and its preamble do not support this argument:

1. The Rule provides a definition of MIT:

Prior to hydraulic fracturing, the operator must perform a successful mechanical integrity test, as follows: (1) If hydraulic fracturing through the casing is proposed, the casing must be tested to not less than the maximum anticipated surface pressure that will be applied during the hydraulic fracturing process. (2) If hydraulic fracturing through a fracturing string is proposed, the fracturing string must be inserted into a liner or run on a packer-set not less than 100 feet below the cement top of the production or intermediate casing. The fracturing string must be tested to not less than the maximum anticipated surface pressure minus the annulus pressure applied between the fracturing string and the production or intermediate casing. (3) The mechanical integrity test will be considered successful if the pressure applied holds for 30 minutes with no more than a 10 percent pressure loss.

80 Fed. Reg. at 16219 (43 C.F.R. § 3162.3-3(f)).

2. The preamble to the Rule provides additional explanation of what is expected for an MIT. For example, the preamble notes that American Petroleum Institute (API) standards call for certain pressure testing of production casings. BLM states that "[t]his [API] casing pressure test meets the intent of the MIT required by the rule." 80 Fed. Reg. at 16159; DOIAR0002075 at 0002083 (API standards).

The Associations also assert that the meaning of an MIT is unclear because BLM states in the preamble that the MIT under the Rule is "distinct" from the pressure tests required under existing Onshore Order No. 2, but allegedly has not explained the distinction. Dkt # 13 at 15, 40. The record does not support this argument:

- 1. Onshore Order No. 2 requires pressure testing to specific numeric levels: "0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield." Onshore Order No. 2 § III.B.1.h, 53 Fed. Reg. 46798, 46809 (Nov. 18, 1988) (in administrative record at DOIAR0000278); see also id. § III.B.1.i (additional pressure test for exploratory wells). These requirements (which were adopted in 1988) predate current unconventional drilling practices. See 80 Fed. Reg. at 16129.
- 2. In contrast, the Rule requires a pressure test based not on a specific numeric requirement, but on the "maximum anticipated surface pressure" expected to be applied during fracturing. 80 Fed. Reg. at 16160, 16219. The MIT sets a different standard for the level of pressure that must be applied, but like Onshore Order No. 2, it involves a casing pressure test.

The record also does not support the Associations' claim that there is no value to pressure-testing production casing that will later be subject to hydraulic fracturing. Dkt # 13 at 16 n. 17; Dkt # 42 at 6-9 (Associations' argument that this requirement "serves no purpose"). The record explains why pressure tests are necessary for production casing (i.e., the casing covering the zone from which oil and gas will be produced), even though that casing will be perforated as part of hydraulic fracturing:

1. American Petroleum Institute standards describe the purpose of production casing as (a) "to provide the zonal isolation between the producing zone and all other subsurface formations," and (b) to contain hydraulic fracturing fluids being pumped from the surface into the producing zone without affecting any other subsurface formations. DOIAR0002075 at 0002083; see also id at 0002084 (diagram); DOIAR0100522 at 0100562 (BLM Economic Analysis citing API's standards).

- 2. API directs that "[p]rior to perforating and hydraulic fracturing operations, the production casing should be pressure tested at a pressure that will determine if the casing integrity is adequate to meet the well design and construction objectives." DOIAR0002075 at 0002083 (emphasis added). It explains that "casing must be able to withstand the . . . collapse and burst pressures that it might be subjected to during different phases of the well's life The casing used in a well should be designed to withstand the anticipated hydraulic fracturing pressure" and other expected stresses. DOIAR0002075 at 0002079-80. In other words, while hydraulic fracturing will force fluids through the perforations in the casing, the MIT pressure test ensures that no other weaknesses exist in the casing that would allow fluids to leak into other formations where it is not intended.
- 3. API also states that the directions in its standards apply to horizontal as well as vertical wells: "the considerations and recommendations for setting conductor, surface, intermediate production casing strings are the same as those for vertical wells." <u>Id.</u> at DOIAR0002084.
- 4. BLM's preamble provides a similar explanation that the purpose of requiring an MIT at the maximum anticipated pressure is to ensure that the entire length of the casing "is able to withstand the applied pressure and contain the hydraulic fracturing fluids." 80 Fed. Reg. at 16159. In the preamble to the 2013 revised proposed rule, BLM explained that "[t]esting would emulate the pressure conditions that would be seen in the proposed hydraulic fracturing in order to ensure that the casing used in the well would be robust enough to handle the pressures." 78 Fed. Reg. 31635, 31653 (May 24, 2013) (DOIAR0048153).

The administrative record demonstrates that the MIT requirement is neither "unexplained," nor arbitrary and capricious. Dkt # 20 at 21-23.

II. THE ARGUMENT THAT BLM'S USABLE WATER DEFINITION IS "UNJUSTIFIED" AND AN "UNEXPLAINED DEPARTURE FROM EXISTING RULES"

The Rule uses a 10,000 parts per million (ppm) total dissolved solids (TDS) limit to define "usable waters" that must be isolated and protected when companies construct wells. This definition incorporates the standard for an underground source of drinking water (USDW) under Safe Drinking Water Act regulations. 80 Fed. Reg. at 16217 (43 C.F.R. § 3160.0-5). The Associations assert that BLM failed to justify this definition, and that it is an "unexplained departure" from existing law. Dkt # 13 at 16-24.

The preliminary injunction responses filed by the Citizen Groups and BLM summarize the agency's explanation for this requirement. First, the 10,000 ppm threshold has been part of the usable water definition under BLM Onshore Order No. 2 since 1988, and reflects only a restatement of existing law. It also is consistent with the standard used in federal regulations implementing the Safe Drinking Water Act (SDWA). Moreover, the continued use of 10,000 ppm is justified because it serves to protect aquifers that may be needed for drinking water and other purposes. Dkt # 20 at 23-26; Dkt # 34 at 24-27.

The administrative record supports BLM on these points.

A. Explanation Of Usable Water Definition

Numerous record materials document BLM's explanation that using 10,000 ppm as the basis for its usable water definition is not a departure from existing law (see Dkt # 20 at 23-25). For example:

- 1. BLM made clear when it adopted Onshore Order No. 2 in 1988 that "[t]his Order requires the protection of usable water," defined as water with up to 10,000 ppm. 53 Fed. Reg. at 46798, 46801, 46805.⁵
- 2. BLM officials repeatedly explained to the public and other stakeholders that the existing requirement is 10,000 ppm. DOIAR0003358 at 0003427; DOIAR0005537 at 0005564; DOIAR0005880 at 0005902; DOIAR0006161 at 0006188 (2010-2011 explanations by BLM officials).
- 3. The preambles to the 2012 proposed rule, the 2013 revised rule proposal, and the 2015 final rule, all explain this point. 77 Fed. Reg. 27691, 27699 (May 11, 2012) (preamble to proposed rule) (DOIAR0020419); 78 Fed. Reg. at 31646-47 (preamble to 2013 revised proposal); 80 Fed. Reg. at 16141-142 (2015 final rule preamble).
 - 4. Additional record support for this explanation is described at pp. 26-30, infra.

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⁵ This Federal Register notice also documents BLM's explanation that Onshore Order No. 2 was promulgated by notice-and-comment rulemaking, and thus is a legally-binding regulation that supplemented the earlier rule found in the Code of Federal Regulations. Dkt # 20 at 25.

BLM also explained that it uses a 10,000 ppm standard because it is consistent with the threshold applied by the Environmental Protection Agency in implementing SDWA:

- 1. BLM made this point when it established the standard in 1988. 53 Fed. Reg. at 46798, 46801.
- 2. The final Rule expressly references the SDWA regulations. 80 Fed. Reg. at 16217 (43 C.F.R. § 3160.0-5, referencing 40 C.F.R. § 144.3).
- 3. BLM explained this in stakeholder meetings during the rulemaking process. <u>See, e.g., DOIAR0009990</u> at 0010171-172 (BLM explanation during Jan. 2012 consultation with tribes); DOIAR0009607 at 0009706-707 (Jan. 2012 tribal consultation).

B. Record Explanation For BLM Conclusion That Usable Water Definition Is "Justified"

In preliminary injunction briefing, BLM and the Citizen Groups explained that the agency maintained the Onshore Order No. 2 standard because while water with between 5,000-10,000 ppm TDS requires treatment for many uses, it may be needed in the future and in some cases is already being used. Dkt # 20 at 26; Dkt # 34 at 26-27.

The administrative record provides support for this policy conclusion by the agency. For example:

- 1. BLM explained in the preamble that "[g]iven the increasing water scarcity [in much of the United States] and technological improvements in water treatment equipment, it is not unreasonable to assume aquifers with TDS levels above 5,000 ppm are usable now or will be usable in the future." 80 Fed. Reg. at 16142.
- 2. BLM explained in public meetings that the point of the 10,000 ppm standard is in part to protect "potential" drinking water sources: even "if we're not using that water today we may be using it ten years [or] one hundred years from now. So we don't want to contaminate it now so it's unusable in the future." DOIAR0009607 at 0009703.
- 3. Similarly, the Environmental Protection Agency commented to BLM that although treatment is needed before it can be used for drinking water, "protecting waters with less than 10,000 mg/L TDS will ensure an adequate supply for present and future generations." DOIAR0038117.

4. Comments from the American Water Works Association (AWWA) indicate that this type of groundwater is <u>already</u> being used for drinking water in some parts of the country. <u>See</u> DOIAR0038117 at 0038118 (pumping of 8,000 ppm groundwater in Florida). AWWA explained that:

The best sources of drinking water are already being used by utilities. Coupled with challenges resulting from climactic changes, population growth and land development, many utilities are turning to more challenging groundwater sources such as those that are very deep or have high salinity concentrations, also because the pumping costs for these deep wells are no longer prohibitive given the lack of sufficient water elsewhere.

Id.

The AWWA advocates protecting groundwater with <u>even more than</u> 10,000 ppm TDS because "[i]n a climate-stressed and ultimately water-stressed world, it is quite possible that these aquifers will be used as drinking water supplies in the near future." Id.

- 5. Other documents in the record indicate that desalination is already being used for municipal water treatment in some areas. DOIAR0068337. A report from an oil and gas industry group also observes that brackish water may be more widely used for domestic purposes in the future. See DOIAR0092701 at 0092718 (explaining that advances in treatment technologies will make them available for "broader applications" such as "desalination of brackish groundwater . . . to potable standards," which will benefit "communities experiencing drought conditions"); see also, DOIAR0097887 (energy company sending report to BLM).
- 6. The record indicates that brackish water is also being used today for some industrial purposes. DOIAR0075709 at 0075763 (power plant cooling). In some cases, the oil and gas industry itself desalinates brackish groundwater for its own uses. DOIAR0002548 at 0002566; DOIAR0011339 at 0011478 (oil and gas companies in Barnett shale of Texas using it for fracturing); see also id. at 0011480 (noting use of "mobile desalination plants" as option for reducing water use); DOIAR0092701 at 0092709-710.

III. THE ARGUMENT THAT THE RULE IS NOT JUSTIFIED

The Associations assert that there is no "rational justification" for adopting the Rule at all, because: (a) "public concern" about unconventional oil and gas development is "insufficient justification" for the Rule; (b) there is supposedly no "evidence linking the hydraulic fracturing process to groundwater contamination," and (c) BLM allegedly has failed to explain why existing state regulations are inadequate. Dkt # 13 at 24-27. These arguments are not supported by the administrative record.

A. Support For BLM Decision To Adopt More Precautionary Rules

The Associations characterize BLM's adoption of the Rule as an arbitrary response to unsubstantiated "public concern" about hydraulic fracturing. Dkt # 13 at 24-25. BLM explained, however, that the Rule represents a necessary regulatory update to address "technological advances and changes in oil and gas operations" that raise new environmental risks and warrant additional precautions. Dkt # 20 at 26-27; see also Dkt # 34 at 14-17. Record cites documenting and supporting BLM's position include the following:

1. BLM explained in the preamble that its rules had not been revised since 1988. 80 Fed. Reg. at 16128. The rule revisions respond to "the increasing use and complexity of hydraulic fracturing coupled with advanced horizontal drilling technology." <u>Id.</u> The agency explained that this combination has resulted in:

larger-scale operations that have allowed greatly increased access to shale oil and gas resources around the country, sometimes in areas that have not previously or recently experienced significant oil and gas development. These newer wells can, among other complexities, be significantly deeper and cover a larger horizontal area than the operations of the past. This increased complexity requires additional regulatory effort and oversight.

<u>Id.</u>

- 2. In particular, BLM noted that unconventional operations "apply increased pressures and volumes of fluid within the subsurface." 80 Fed. Reg. at 16188.
- 3. BLM's Regulatory Impact Analysis for the Rule (the Economic Analysis) (DOIAR0100522) also concluded that information currently collected was inadequate for oversight of more complex modern operations both for making informed decisions about proposed operations and responding effectively to problems. Economic Analysis at 0100533.
- 4. In its preamble, BLM acknowledged that scientific uncertainty exists about the risks of unconventional oil and gas development, and that inherent subsurface complexities make "efforts to trace contaminants in groundwater to specific hydraulic fracturing operations" challenging. 80 Fed. Reg. at 16188-189. But the agency concluded in the preamble that "no law requires the BLM to wait for a significant pollution event before promulgating common-sense preventative regulations." Id. at 16189.

The record also contains numerous comments that support BLM's decision to adopt more precautionary regulations. For example:

1. The <u>Secretary of Energy Advisory Board</u> subcommittee on natural gas (SEAB) urged BLM to update its regulations to account for the use of unconventional technologies. 80 Fed. Reg. at 16128; DOIPS0389630 (90-Day Report, August 18, 2011); see also Dkt # 34 at 14-17. It observed that "[t]here are serious environmental impacts underlying [public] concerns [about unconventional oil and gas development] and these adverse environmental impacts need to be prevented, reduced and, where possible, eliminated as soon as possible." DOIPS0389630 at 0389638. The Committee went on to state that "with anticipated increase in U.S. hydraulically fractured wells, if effective environmental action is not taken today, the potential environmental consequences will grow to a point that the country will be faced with a more serious problem." <u>Id.</u> at 0389638-639. It concluded that "the nation has important work to do in strengthening the design of a regulatory system" that can adequately manage this rapidly-changing industry. <u>Id.</u> at 0389641.

2. **Environmental Protection Agency** testimony in the record explained:

While hydraulic fracturing has been going on for 60 years, the most significant relatively recent change has been the use of horizontal drilling in conjunction with hydraulic fracturing. Borehole lengths can now exceed 15,000 feet and each hydraulic fracturing job can use more than 6 million gallons of water per well depending on the depth of the formation and the length of the lateral in the targeted fracturing zone. These large volumes of water and increased pressures used for injection raise serious concerns regarding exposure of hydraulic fracturing fluids to drinking water resources. In addition, the use of new chemicals has continued to evolve and change.

DOIAR0007249 at 0007260 (May 11, 2011 testimony). Later EPA comments supported a number of the new requirements in BLM's Rule as "prudent, sensible measures to help assure the continued safe and responsible development of hydrocarbon resources." DOIAR0088152 at 0088152.

- 3. <u>Halliburton Energy Services, Inc.</u> submitted comments supporting regulations to "protect against risks to human health or the environment," and agreeing with BLM "that the primary ways to do this are through ensuring wellbore integrity and effective management of flowback water." DOIAR0090085 at 0090086.
- 4. The <u>National Park Service</u> submitted comments recommending that BLM require disclosure of chemicals used in hydraulic fracturing operations and that BLM "ensure . . . appropriate construction standards" for wells used in fracturing operations to avoid "stray gas migration" to drinking water aquifers or the atmosphere. DOIPS0179284 at 0179285. The Park Service also supported requiring the use of tanks instead of pits because "if a tank leaks, there is a greater likelihood that a leak will be discovered and fixed," and because such systems reduce water and waste volumes. Id. at 0179287-289; see also DOIAR0045370.
- 5. A February 2012 <u>Congressional report</u> examined a random sample of 706 oil and gas wells on federal lands, and found that 30 percent were hydraulically fractured in, near, or below an underground source of drinking water. DOIAR0012583 at 0012596-597. Seven

percent of the sample represented wells (coal bed methane wells) that were fractured within an underground source of drinking water. <u>Id.</u> The report also noted that Onshore Order No. 2 had not been updated since 1988 and reflects neither the significant technological advances of hydraulic fracturing and associated technologies nor the tremendous growth in its use. <u>Id.</u> at 0012592.

- 6. The <u>American Public Health Association</u> is on record supporting the need for chemical disclosure requirements and discussing evidence of improper well construction linked to methane in nearby water wells. DOIPS0391519 at 0391527 ("The new scope, scale, and technologies associated with [high-volume hydraulic fracturing] have impacts not anticipated by existing laws and require new regulations and monitoring systems in order to protect public health").
- 7. The <u>American Water Works Association</u> (AWWA) supported several elements of BLM's rule revisions, including requiring chemical disclosure and cement evaluation logs. DOIPS0000292; DOIPS0301561.
- 8. The **Environmental Defense Fund** submitted extensive comments asking BLM to revise and strengthen its regulations in multiple areas, such as well integrity, chemical disclosure, and wastewater management and disposition. DOIPS0365166 at 0365166, <u>id.</u> at 0365202-207.
- 9. A coalition of conservation groups including <u>the Natural Resources Defense</u> <u>Council, the Citizen Groups</u>, and others, submitted extensive comments documenting the need to update and strengthen BLM's rules. DOIPS0365410; DOIAR0029551.
- 10. The **Eastern Shoshone Tribe** (which has experience with energy development on the Wind River reservation) submitted comments in favor of strong chemical disclosure requirements, improved standards for well construction and integrity, and a ban on open pits. DOIPS0365500 at 0365504, 511-514.
- 11. BLM held <u>public forums</u> in different parts the country in which more than 600 members of the public voiced concerns over the environmental and health impacts of hydraulic fracturing. Economic Analysis (DOIAR0100522) at 0100532; <u>see, e.g.</u>, DOIAR0005537 (transcript from April 20, 2011 Bismark, ND meeting) at 0005613 (tribal member voices concern over groundwater contamination), 0005619 (land association representative expressing concerns with the increased potential for spills and contaminated water due to hydraulic fracturing), 0005623-630 (environmental group representative discusses public concern about groundwater contamination and spills), 0005642-643 (North Dakota resident discusses concerns that hydraulic fracturing fluids will spill into the Missouri River, states that over 20 spills of fracturing fluids have already occurred this year in his area), 0005729-742 (more examples of concerned members of the public discussing water contamination and concerns over the lack of public disclosure of chemicals, urging BLM to regulate hydraulic fracturing); DOIAR0009990 at 0010056 (Jan. 12, 2012 tribal consultation in Billings Montana where tribal member voiced concerns of well integrity and stated "we want fracking, but we want it done in a prudent, careful manner so we don't get repeat of [a previous oil and gas accident]. And that [accident was due

to] lack . . . of oversight by the federal government"), 0010061 (tribal member voicing concern that industry should not withhold content of hydraulic fracturing fluids as trade secrets), 0010065 (concerns over potential groundwater contamination related to hydraulic fracturing).

12. All told, more than <u>one million members of the public</u> submitted comments asking BLM to take a more protective approach in addressing hydraulic fracturing. <u>See</u> DOIAR0079598 at 0079600; <u>see also</u> DOIAR0020573 (New York Times editorial); DOIAR0029650.

This administrative record evidence demonstrates that it was not arbitrary and capricious for BLM to respond to public concern by updating its rules and taking a more precautionary approach to regulating hydraulic fracturing and unconventional oil and gas development. Dkt # 20 at 26-29; Dkt # 34 at 14-17.

B. Evidence That The Rule Will Prevent Groundwater Contamination and Other Impacts

The Associations contend that the Rule is arbitrary and capricious because of "a lack of any evidence linking the hydraulic fracturing process to groundwater contamination." Dkt # 13 at 25. The Associations, however, acknowledge that their broad reference to the "hydraulic fracturing process" is not intended to encompass impacts from many of the particular activities regulated by the Rule. See id. at 25 n. 25 (footnote clarifying that "[h]ydraulic fracturing is not the entire process of drilling, casing a well, and producing oil and natural gas [E]ach part of the development process bears specific and unique risks").

The Citizen Groups' preliminary injunction brief pointed out that there are numerous examples linking the oil and gas activities regulated by the Rule to groundwater contamination and other adverse impacts, and illustrating the benefits that the Rule will provide. Dkt # 34 at 19-32. The specific activities addressed by the Rule include: (1) requiring agency review and approval in advance of fracturing operations, (2) well casing and cementing, (3) pits, and (4) requiring disclosure of the chemicals used during fracturing operations. <u>Id.</u>

The following are examples from the administrative record documenting the impacts from these activities, as well as the concrete benefits of the Rule:

1. Evidence of the benefit of area review and advance approval of fracturing operations

The Rule requires advance review and BLM approval of hydraulic fracturing operations, 80 Fed. Reg. at 16218-219, with applicants required to provide information such as: (a) identifying the "confining zone" preventing fluids from moving from the fracturing zone into a usable aquifer, (b) maps of existing subsurface faults or fractures, or existing wellbores, within a half mile, (c) the estimated length and direction of the fractures to be induced in the operation; and (d) an estimate of the distance from the top of the zone being fractured to the nearest usable aquifer zone. 80 Fed. Reg. at 16217-219. This information (sometimes called the "area of review") allows BLM to ensure there are no pathways that allow gas or fluids to escape the area being fractured and cause unintended impacts. See Dkt # 34 at 27-30.

Documents in the administrative record support the environmental benefits that will result from this requirement:

- 1. BLM explained in the preamble that "the information included in the application allows the BLM to . . . assess the potential impacts of the proposal" for hydraulic fracturing, and the advance approval lets the agency avoid problems "through modification of the proposal or by attaching conditions." 80 Fed. Reg. at 16147.
- 2. Public comments asked BLM to consider an "area review" approach that analyzes nearby wells, natural fractures, and the distance between the hydraulically fractured zone and usable aquifers, to ensure that "no such pathway may be a conduit of fluids into a source of protected water." DOIPS0365166 at 0365172 (comments from Environmental Defense Fund (EDF)); see also, DOIPS0365410 at 0365444-445 (similar comments from Citizen Groups and other organizations); DOIPS0063815 at 0063829-832; DOIAR0040662. These comments noted that the State of Alaska was considering an approach similar to what BLM adopted in the Rule. DOIPS0365166 at 0365173-174.
- 3. One of the benefits of this requirement is so BLM can avoid "frack hits" (or "communication" between wells) that can result in blow outs or spills at the surface, or compromise the integrity of other wells. 80 Fed. Reg. at 16181-182; Dkt # 34 at 29.

Administrative record documents provide evidence that frack hits are a problem on public lands. <u>See, e.g.</u>, DOIAR0102804 at 0102823 (Feb. 2011 Interior Department email identifying "horizontal drilling issues, including communication issues" as a "key aspect[] of fracking" concerns); DOIAR0012724; DOIAR0033634; DOIAR0053641; DOIAR0053644; DOIAR0065787; DOIAR0070049; DOIAR0075052; DOIAR0075388; DOIAR0076381; Economic Analysis (DOIAR0100522) at 0100531.

- 4. In considering public comments, BLM recognized that such a review would provide benefits. DOIAR0067708 at spreadsheet line 74 (noting in response to comments that frack hits have been a problem in some states and that additional information "would be useful in this context"); DOIAR0076381; DOIAR0095539; 80 Fed. Reg. at 16181-182 (discussing frack hits), 16153 (requiring estimated fracture dimensions addresses frack hits).
- 5. In addition to preventing frack hits, the preamble explains that BLM adopted its requirement for an area review and advance approval to ensure that an adequate "confining zone" exists, and to address situations where fracturing occurs at depths shallow enough to endanger usable aquifers. 80 Fed. Reg. at 16153 (the review "provide[s] the BLM with enough information about the proposed hydraulic fracturing operation [to identify] potential hazards, such as . . . fracture propagation into usable water zones"), 16217 (definition of "confining zone").
- 6. Comments in the administrative record explain that "in most cases there are thousands of feet of essentially impermeable rock between" the oil and gas production zone and protected water, but where fracturing involves a "short distance or uncertain geology, it is critical that operators show that there is nevertheless a 'confining layer' such that the well will not create conduits for movement of fluid into a source of protected water." DOIPS0365166 at 0365178 (EDF comments); see also DOIAR0027307 at 0027321 (ConocoPhillips presentation stating that "more scrutiny is appropriate" where only limited separation exists between the usable aquifer and the zone being fractured); DOIPS0365410 at 0365444-446 (similar).
- Administrative record documents provide an example illustrating the value of the Rule's area review and approval requirement: the groundwater contamination in Pavillion, Wyoming. See Dkt # 34 at 22 (discussing Pavillion). Administrative record documents describe how in Pavillion, oil and gas was being produced (and hydraulic fracturing taking place) in the same geologic formation used for water supplies in the area. DOIAR0008543 at 0008552. In such a situation, there may have been no "confining zone" separating usable water from the oil and gas producing formation. The administrative record also indicates that the surface casing for oil and gas wells in Pavillion did not extend below the depth at which nearby water wells were drilled. Id. at 0008549; see also DOIAR0011753 at 0011755 (Wyoming testimony that it identified 36 wells "with surface casing set depth or cementing issues"). If so, the casing did not isolate and protect those usable waters. Had the Rule been in effect for the permitting of the Pavillion oil and gas wells, it would have allowed the agency to identify and correct these issues before they impacted nearby water wells.

2. Evidence that the Rule will limit harmful impacts from pits

Other administrative record materials document the adverse impacts and accidents from pits, and the benefits of requiring tanks. See Dkt # 34 at 19-22. For example:

- 1. In the preamble, BLM recognized that "the storage of flowback, or recovered fluid in pits, poses a risk of impacts to air, water and wildlife. . . . BLM believes that aboveground tanks, when compared to pits, are less prone to leaking, are safer for wildlife, and will have less air emissions." 80 Fed. Reg. at 16162. The agency went on to say that "in the BLM's experience, the use of tanks in lieu of pits in high-volume operations limits potential environmental impacts, allows for quicker site preparation, reduces reclamation requirements, eliminates longer term environmental risk, reduces risks of spills or leaks, and increases safety." Id. at 16163.
- 2. BLM observed in its environmental assessment for the Rule that "leaks in pits that may result from a puncture in the liner could not easily be identifiable because flowback fluids are generally stored in temporary pits, which [do] not have leak detection systems." DOIAR0100067 at 0100112. In contrast, BLM concluded that:

The <u>use of storage tanks would almost eliminate the risk of flow back fluids</u> <u>damaging various environmental resources</u>, which include soils, surface and groundwater sources, and wildlife [B]ecause tanks are placed above-ground, any potential spills or leaks would be easily identifiable and a clean-up response could be executed fairly promptly. This prompt response would ensure that spills or leaks do not settle for an extended period and percolate through the ground.

Id. (emphasis added).

- 3. Halliburton Energy Services comments cited a 2013 survey in which 215 experts from regulatory agencies, industry, academia and non-governmental organizations were asked to identify the "priority environmental risks related to shale gas development." DOIAR0090085 at 0090093. The consensus was that both "flowback of reservoir fluids" and "casing failure and cementing failure" are the key concerns associated with unconventional development. <u>Id.</u> at 0090093-94; <u>see also, id.</u> at 0090093 n. 35 (citing General Accounting Office report on adverse impacts from flowback pits).
- 4. The record contains numerous examples of spills and contamination associated with the use of pits for flowback and produced water. See, e.g., DOIPS0392560 at 0392567, 570-571, 581-584 (collecting examples of incidents involving pits); DOIPS0064058 (Colorado administrative order finding that resident Ned Prather fell ill after drinking water contaminated by benzene leaching from a pit used to store hydraulic fracturing fluids); DOIAR0003358 at 0003425 (statement by New Mexico oil and gas official that "[o]perators have not been maintaining proper control of their waste and some of those . . . wastes have gotten into surface and ground water"); DOIAR0029551 at 0029595-599 (Citizen Group comments providing

examples of pit accidents); see also DOIAR0012583 at 0012600, 0012605-606 (numerous safety violations related to improper pit construction).

- 5. Tribal comments from Wyoming supported a ban on open pits (except in emergencies). DOIPS0365500 at 0365513. These comments noted that "[s]urface pits appear to at least be a contributing factor to [oil and gas-related] water contamination at the Wind River reservation." Id. at 0365514.
- 6. Wildlife studies have found that oil and gas pits kill numerous birds. DOIPS0010183 at 0010186.

3. Evidence that the Rule reduces risks from improper well casing and cementing

As the Citizen Groups pointed out, inadequate well casing and cementing is a major cause of water contamination associated with unconventional oil and gas development. The Rule will help address those accidents by requiring good industry practices such as cement evaluation logs and mechanical integrity tests. Dkt # 34 at 22-24. The Rule also requires companies to submit the results of those tests to BLM, which should reduce the level of non-compliance by companies and improve incentives for diligent performance. <u>Id.</u> at 23-24. The record bears this out. For example:

- 1. The Secretary of Energy's Advisory Board subcommittee on natural gas development in 2011 recommended strengthening requirements for wellbore construction and testing, casing, cementing and pressure testing. Economic Analysis (DOIAR0100522) at 0100532; DOIPS0389630 at 0389658-659 (SEAB report noting discrepancies in industry practice and regulations related to wellbore integrity and calling for best practices).
- 2. As noted above, Halliburton cited a survey of experts that identified "casing failure and cementing failure" as a key risk associated with unconventional development. DOIAR0090085 at 0090093-94.
- 3. Based on industry sources and enforcement action records, BLM estimated that between 1-5 percent of initial cement jobs are inadequate. DOIAR0046876 at 0046915-16; see also DOIPS0389255 at 0389262 (3 percent of wells in the Marcellus Shale Region have well construction issues allowing methane migration).
- 4. Other studies have found higher rates of well failures. For example, a 2012 study in Pennsylvania concluded that at least 6-7 percent of unconventional wells had casing and cementing problems. DOIAR0030067 at 0030072-74.

- 5. A 2012 Congressional report found that more than 20 percent of major violations identified by BLM between 1998 and 2011 involved non-compliance with casing and cementing requirements. DOIAR0012583 at 0012587.
- 6. Record comments provided many examples of gas and fluid migration resulting from faulty well casing and cementing. See, e.g., DOIPS0365410 at 0365417-418 (citing examples of well integrity failures leading to fluid migration in Wyoming, Colorado, West Virginia, Ohio and Texas); DOIAR0029551 at 0029589-595 (examples where oil and gas activities were linked to groundwater contamination, likely due to faulty well casing and cementing); DOIPS0392560 at 0392566-570, 573-576, 582-583 (additional examples).
- 7. The preamble cites a 2011 study published by the National Academy of Sciences that found systemic evidence of methane contamination of drinking water associated with natural gas extraction in Pennsylvania. The study identified leaky well casings as a likely cause. DOIPS0178872, cited at 80 Fed. Reg. at 16194 n. 11; see also 80 Fed. Reg. at 16194 n. 12 (citing similar 2012 study).
- 8. The record contains evidence of numerous lawsuits alleging water well contamination from oil and gas development, many of which were settled by the energy company and/or are subject to "gag orders." DOIPS0390729 at 0390770-776, Exhibit B.
- 9. Other comments supported requirements for cement evaluation logs and mechanical integrity testing, noting that faulty well casings near aquifers represent the most likely pathway for contamination. See, e.g., DOIPS0365500 at 0365511-512.

4. Evidence of the benefits from disclosure of hydraulic fracturing chemicals

The record also supports the benefits of requiring disclosure of hydraulic fracturing chemicals. See Dkt # 34 at 30-32. For example:

- 1. The Secretary of Energy's Advisory Board subcommittee on natural gas development in 2011 recommended requiring disclosure of chemicals used in hydraulic fracturing. Economic Analysis (DOIAR0100522) at 0100532; DOIPS0389630 (SEAB Report) at 0389654.
- 2. Public comments described many of the practical benefits from requiring such disclosures, including:
 - Allowing residents to conduct baseline testing of water wells prior to oil and gas development that samples for the right chemicals;
 - Helping ensure the safety of first responders responding to spills;
 - Assisting local governments training for accidents, and medical professionals treating those exposed to the chemicals; and

• Incentivizing companies to use safer chemicals in fracturing.

DOIPS0365410 at 0365428 (2013 Citizen Groups' comments); see also, Dkt # 34 at 31.

- 3. BLM has explained that requiring chemical disclosure will enable the agency to better respond when accidents occur. 77 Fed. Reg. at 27700-702.
- 4. The Citizen Groups' brief noted that regulators' experience with companies using diesel fuel for hydraulic fracturing illustrates these benefits. Dkt # 34 at 31-32. The administrative record also documents this point. In 2004 the Environmental Protection Agency stated that the use of diesel fuel represented "the greatest threat to underground sources of drinking water" from hydraulic fracturing. DOIAR0012583 at 0012590. After Congress exempted hydraulic fracturing from the SDWA underground injection control program except when diesel was used energy companies continued to use diesel fuel in some hydraulic fracturing treatments for several years, until the practice was discovered during a Congressional investigation. Federal and state regulators had been unaware of the practice and when it came to light they lacked the information necessary to assess whether it had affected sources of drinking water. Id.; DOIPS0392791 at 0392800; DOIAR0007570 at 0007572 (estimating that between 2005-2009, 32 million gallons of diesel fuel were injected into gas wells in 19 states). As the Citizen Groups pointed out, requiring disclosure of hydraulic fracturing chemicals should help prevent a similar situation from occurring in the future. Dkt # 34 at 31-32.
- 5. The administrative record documents that in addition to diesel fuel, many other chemicals used in hydraulic fracturing are potentially toxic. DOIPS0392791 at 0392800 Table 3 (April 2011 House Report, Chemicals used in Hydraulic Fracturing); DOIPS0064061 (report listing chemicals used); see also DOIAR0029551 at 0029563-564 (examples of accidents involving fracturing fluids and health effects from exposure); DOIPS0392560 at 0392570-572 (similar).

C. Record Evidence Showing That State Regulations Do Not Eliminate The Need For The Rule

The Associations also assert that the Rule is arbitrary and capricious because BLM "fails to account" for existing state regulations, and because BLM did not call out specific inadequacies in current state regulations. Dkt # 13 at 25-26. The record does not support this argument:

1. In the preamble, BLM described its statutory obligations to adopt regulations and assume responsibility for managing the technical aspects of oil and gas development on federal lands. 80 Fed. Reg. at 16137. BLM noted that it has an independent "stewardship" duty to regulate these activities on public lands, and that it "is not allowed to delegate its responsibilities to the states." Id. at 16178.

- 2. BLM noted in preliminary injunction briefing that none of the applicable federal statutes require the agency to find flaws in the regulatory programs of different states as a precondition to developing federal rules addressing activities on public lands. Dkt # 20 at 30 n. 12; see also Lead Case Dkt # 67 at 1-17 (discussing BLM legal authority and statutory obligations under the Federal Land Policy and Management Act (FLPMA) and Mineral Leasing Act (MLA)).
- 3. BLM noted that "the growth of state regulatory regimes for hydraulic fracturing operations in recent years suggests the need to update BLM's preexisting regulations." Dkt # 13 at 29-30. The agency also concluded that those state "regulations continue to be inconsistent across states." 80 Fed. Reg. at 16178. Because states are not subject to the same "stewardship" standards applicable to BLM under FLPMA and the MLA, BLM explained that its Rule "may expand on or set different standards from those" of many states. 80 Fed. Reg. at 16133; see also, DOIAR0095891 at 0095892 (memorandum from BLM Director stating that state standards "are not at all consistent and in many cases would not meet BLM's needs").
- 4. In its preamble to the final Rule, BLM acknowledged and discussed state regulations in several different areas. Dkt # 20 at 29; see, e.g., 80 Fed. Reg. at 16128, 16129-16133, 16152, 16178. For example, BLM makes clear that state regulations are not preempted where they are more protective than the federal Rule. <u>Id.</u> at 16178.
- 5. The final Rule also provides for states to obtain variances from the Rule where state requirements are more protective. 43 C.F.R. §§ 3162.3-3(k)(2), (3). In addition, the Rule incorporates other elements of state law. See, e.g., 43 C.F.R. §§ 3160.0-5 (applying state law determinations in defining "usable water"), 3162.3-3(d) (allowing companies to use state submissions for federal approvals).
- 6. Numerous administrative record documents reflect BLM's consideration and comparison of how different states regulate pits, well casing and cementing, chemical disclosure, and other issues. See, e.g., DOIAR0005095; DOIAR0037995; DOIAR0042990; DOIAR0102804; DOIAR0103562; DOIAR0109294; DOIPS0065512; DOIPS0065596; DOIAR0001806.
- 7. BLM's Economic Analysis reviewed existing state regulations in the nine states that account for 99.3 percent of the well completions on federal and tribal lands (California, Colorado, Montana, New Mexico, North Dakota, Oklahoma, Texas, Utah, and Wyoming) (the Nine States). That review compared how several issues are addressed by state regulations in each of the nine states. Economic Analysis (DOIAR0100522) at 0100575-580.

The Citizen Groups also pointed out in their preliminary injunction briefing that several requirements of the Rule are more protective than most state regulations. Dkt # 34 at 19-32; Lead Case Dkt # 67 at 23-25; Lead Case Dkt # 81 at 20-22. Documents in the administrative

record confirm that the Rule provides additional environmental protection beyond state law in a number of areas:

1. BLM's Economic Analysis review of regulations in the Nine States found that at least two of the primary requirements of the federal Rule are not mandated on a consistent basis by those states:

<u>Pits</u>: unlike the BLM Rule, at least seven of the Nine States do not require the use of tanks statewide.

<u>Cement Evaluation Logs</u>: most of the Nine States do not have regulations comparable to BLM's requirement that companies perform cement evaluation logs (CELs) on intermediate casing and production casing to ensure that they are adequately cemented. 80 Fed. Reg. at 16219. Montana, New Mexico, Oklahoma, and Utah do not require CELs. In California, Texas and Wyoming, CELs may be required in certain situations.

Economic Analysis (DOIAR0100522) at 0100580; see also id. at 0100575-579 (state-by-state discussion).

- 2. BLM concluded that its "area review" requirement is "necessary," and that this information is not consistently collected by states and tribes. See 80 Fed. Reg. at 16147, 16154.
- 3. Based on a preliminary review of the record, it appears that none of the Nine States mandates a process equivalent to the Rule's requirement for an area review and advance approval of fracturing operations. See pp. 13-15, supra; see, e.g., DOIPS0065596 at 0065601-611 (chart of New Mexico regulations); see also, Lead Case Dkt # 67 at 24-25 (Wyoming requirements); Lead Case Dkt # 81 at 22 (North Dakota).
- 4. While Colorado recently adopted a policy to address frack hits (referred to as "offset well" communication), see DOIAR0078378, the record indicates that other states do not have regulations addressing this problem. DOIAR0095891 at 0095893 (Feb. 2015 informational memorandum); DOIAR0078309 line 11.
- 5. Like the BLM Rule, most of the Nine States BLM analyzed require disclosure of chemicals used in fracturing, and most also allow it to be done using the FracFocus web site. Economic Analysis (DOIAR0100522) at 0100580. In the preamble to the Rule, BLM noted that the Secretary of Energy's Advisory Board "has identified a number of areas in which FracFocus needs improvement." 80 Fed. Reg. at 16133. The preamble states that as part of promulgating the Rule, BLM has entered discussions with the operator of FracFocus "and expects further progress in ensuring that the site meets key elements" identified by SEAB. <u>Id.</u> Thus, while the Nine States already provide for disclosure, the preamble indicates that BLM's participation in FracFocus may drive further improvements to those disclosures.

These administrative record documents provide substantial evidence showing that it was not arbitrary and capricious for BLM to adopt a federal rule, rather than relying solely on state regulations. Dkt # 20 at at 30-31.

IV. ARGUMENT THAT THE REQUIREMENT TO SUBMIT PRE-FRACTURING INFORMATION TO BLM IS CONTRARY TO LAW

The Associations assert that the requirement to submit certain information to BLM "before hydraulic fracturing" involves proprietary information and thus is "contrary to federal public records law." Dkt # 13 at 27-28, 34. BLM and the Citizen Groups explained in briefing that the Freedom of Information Act (FOIA) and other public records laws do not shield companies from providing information to federal agencies. Instead, those laws address whether agencies can disclose information to the public. Dkt # 20 at 31-33; Dkt # 34 at 8-11. Companies in the oil and gas sector routinely are required to submit confidential information to BLM under existing law. Information submitted to BLM under the Rule will receive the same protection as any other allegedly proprietary information filed with the agency. Id.

The administrative record demonstrates that although the Rule creates a new requirement to submit information to BLM, that does not mean proprietary information will be disclosed to the public:

- 1. BLM rejected requests by several commenters to include new procedures in the Rule mandating public notice of hydraulic fracturing applications. 80 Fed. Reg. at 16182. Instead, the agency indicated that (separate from its promulgation of the Rule) it "will be exploring ways to provide additional public notice of proposed hydraulic fracturing operations" and that such disclosure would be "consistent with the requirements of Federal law." Id.
- 2. Emails between BLM staff also state that where geological information included in an application falls within the scope of FOIA exemptions 4 or 9, BLM "ha[s] no intention of posting this type of information or routinely making it public." DOIAR0079620; see also DOIAR0083062; DOIAR0026883-87 (explaining how BLM uses the FOIA exemptions framework to evaluate confidentiality of exploratory well information).

As the Associations note, the preamble states that BLM believes some of the information submitted before hydraulic fracturing (the estimated fracture length, height and direction) "would not routinely meet" the criteria for exemption from disclosure under FOIA. Dkt # 13 at 29 (quoting 80 Fed. Reg. at 16154). But this case involves a facial challenge to the Rule, and as BLM and the Citizen Groups explained, a statement about how FOIA may later be applied to the Rule does not mean that the Rule itself violates any public disclosure laws. See Dkt # 20 at 33, 48-49; Dkt # 34 at 10-11.

The administrative record demonstrates that BLM's preamble statement does not require improper disclosure of confidential information. BLM's regulations provide an established review process for situations where the agency and the submitter disagree about whether information is protected from public disclosure. Dkt # 20 at 33; Dkt # 34 at 11. The record shows that BLM expects to follow its normally-applicable FOIA regulations and other public disclosure laws in implementing the Rule. For example:

- 1. In the preamble, BLM indicated that information on hydraulic fracturing applications (and other information submitted for compliance with the Rule) "will be made available to the public, consistent with the requirements of Federal law." 80 Fed. Reg. at 16182.
- 2. The preamble also states that "[a]s with any submission of information to a Federal agency, the submitter 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 16173; see also id. ("The Rule provides the same procedural safeguards for hydraulic fracturing information as for all other information obtained by the" agency); 78 Fed. Reg. at 31660 (noting that FOIA regulations provide for ten-day notice when disagreement exists over disclosure).

⁶ At the June 23 hearing, the Court inquired about the legal significance of statements in the preamble. As the case cited by the Associations explains, the "language in the preamble of a [statute or regulation] is "not an operative part of the" law and "is not controlling over the language of the regulation itself." Wyoming Outdoor Council v. U.S. Forest Service, 165 F.3d 43, 53 (10th Cir. 1999) (internal quotations omitted) (cited in Dkt # 42 at 3). Instead, the preamble "serve[s] as a source of evidence concerning contemporaneous agency intent" in promulgating a regulation. <u>Id.</u>

3. In response to comments, BLM explained that the normal FOIA exemption framework will be applied to information submitted to comply with the Rule. DOIAR0110490 at 0110494; DOIAR0068164 at 0068167-168.

The administrative record also does not support the Associations' argument that BLM acted arbitrarily by treating post-fracturing disclosures differently than confidential information submitted prior to fracturing. Dkt # 13 at 27-28. As BLM explained in the preamble, the post-fracturing disclosures serve a different purpose than the information submitted before fracturing:

- 1. The purpose of the post-fracturing disclosures is to make that information available to the public. 80 Fed. Reg. at 16166. As part of this goal, the Rule provides for post-fracturing disclosures to be made directly to FracFocus, a public web site. <u>Id</u>. at 16220-221 (43 C.F.R. § 3162.3-3(i)). The preamble states that if the post-fracturing information is submitted to BLM, the agency will upload it to the FracFocus site. <u>Id</u>. at 16166.
- 2. In relying on "direct public disclosure" to FracFocus, BLM does not require submittal of claimed confidential information in post-fracturing disclosures. <u>Id</u>. at 16133, 16221 (43 C.F.R. § 3162.3-3(j)). The agency asserted that it did not need to routinely receive confidential information in every post-fracturing disclosure "in order to make informed management decisions," <u>id</u>. at 16174, but provided that BLM could require the operator to submit the previously-withheld confidential information in those situations where it is needed. <u>Id</u>. at 16221 (43 C.F.R. § 3162.3-3(j)(3)).
- 3. In contrast, BLM's primary purpose in requiring submittal of information before fracturing is not public disclosure. BLM explained that it wants the pre-fracturing information for its own use: "The intent of this requirement is to provide the BLM with enough information" to evaluate proposed fracturing operations and avoid potential hazards. Id. at 16153. BLM determined that collecting this information and approving fracturing operations in advance is "necessary" so that it can avoid frack hits or other threats of contamination "through modification of the proposal or by attaching conditions of approval." Id. at 16147. This goal would not be served if companies could withhold information from BLM based on confidentiality claims. Instead, the agency chose to treat it the same way it does all other proprietary information submitted by companies in seeking approval to drill on public lands. Id. at 16173.

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⁷ The record also shows that if the Rule were somehow interpreted to require disclosure of confidential drilling-related information to the public, the Rule still would not be contrary to law. See Dkt # 34 at 10 n. 9 (making this point). Comments from both the Citizen Groups and Halliburton Energy Services explained that BLM has the authority to adopt a rule requiring public submission and public disclosure of trade secrets and other confidential information. DOIPS0365410 at 0365433-436 (Citizen Groups' comments); DOIPS0365245 at 0365260 (Halliburton Comments).

The record shows that it was not arbitrary and capricious for BLM to treat information required before fracturing differently from post-fracturing disclosures with regard to confidentiality claims, where the two requirements serve different purposes. See Dkt # 20 at 29-30.

V. THE ASSOCIATIONS' ARGUMENT THAT BLM VIOLATED THE REGULATORY FLEXIBILITY ACT

The Associations argue that the Rule is "procedurally deficient" because BLM did not a prepare full "regulatory flexibility analysis" under the Regulatory Flexibility Act, 5 U.S.C. § 601, et seq. (the RFA). The administrative record does not support this claim.

As discussed in BLM's brief, the RFA generally directs agencies to prepare a regulatory flexibility analysis (Flexibility Analysis) unless the agency certifies that a rule will not "have a significant economic impact on a substantial number of small entities." 5 U.S.C. § 605. This finding is reviewed to determine whether the agency made a "reasonable, good-faith effort" to comply with the RFA. Dkt # 20 at 35; Council for Urological Interests v. Burwell, 790 F.3d 212, 227 (D.C. Cir. 2015). Court review under the RFA is "highly deferential, particularly . . . with regard to an agency's predictive judgments about the likely economic effects of a rule." Helicopter Ass'n Intern., Inc. v. FAA, 722 F.3d 430, 438 (D.C. Cir. 2013); Burwell, 790 F.3d at 227.

As BLM pointed out, the companies' disagreement with the agency's cost predictions does not demonstrate that those predictions are inadequate under the RFA. See Helicopter

Ass'n, 722 F.3d at 439; Associated Dog Clubs of New York State v. Vilsack, 75 F. Supp. 3d 83, 93 (D.D.C. 2014); Dkt # 20 at 34-35, 41, 46 (petitioners' disagreement with BLM's cost analysis does not render it inadequate). Criticisms of the agency's predictions fall short unless they are supported by evidence showing that the costs of an agency's rule would in fact result in "a

significant economic impact on a substantial number of small entities." <u>Helicopter Ass'n</u>, 722 F.3d at 438-39 (even where agency acknowledged underestimating cost of regulation affecting price of helicopter flights, RFA challenge failed because cost difference was "not significant in relation to the total cost of a helicopter flight").

The administrative record shows that BLM met this highly deferential standard when it determined that the Rule would not result in "a significant economic impact on a substantial number of small entities."

A. General Administrative Record Support

The Citizen Groups and BLM argued in briefing that the agency's estimate of the compliance costs of the Rule were reasonable and those costs would not result in a significant impact or injury to companies. Dkt # 20 at 36; Dkt # 34 at 8. The record supports this:

- 1. BLM found that the cost of complying with the Rule would amount to \$11,400 per operation, which represents only 0.13-0.21 percent of the cost of constructing a new well. 80 Fed. Reg. at 16205; Economic Analysis (DOIAR0100522) at 0100526-527.
- 2. The agency found that even assuming all affected oil and gas companies were small entities (which is not the case), compliance costs will be too modest to have a "significant economic impact" on a substantial number of them. 80 Fed. Reg. at 16209-210.
- 3. As noted at the June 23 hearing (June 23, 2015 transcript at 218:24-219:4 (June 23 tr.) (Lead Case Dkt # 103)), BLM's figures substantially <u>overstate</u> the Rule's impact on small entities because the agency "assume[d] that all entities (all lessees and operators) that may be affected by this rule are small entities, even though that is not actually the case." 80 Fed. Reg. at 16209. The Economic Analysis found that <u>40 percent</u> of the likely affected companies whose size BLM could determine did not qualify as small businesses. <u>Id</u>. (only 33 of 55 companies with Securities and Exchange Commission filings were small businesses); Economic Analysis at 0100619-620. Thus, the conservative assumptions in BLM's Economic Analysis nearly doubled the Rule's likely impact on small businesses.
- 4. BLM's Economic Analysis determined that for the 60 percent of companies it identified as small businesses, costs associated with different alternatives for the Rule would only be 0.15 percent of company net incomes (not their gross revenues). Economic Analysis at 0100623, 630-31.

5. BLM also concluded that "the actual compliance costs of the rule are likely much less than these estimates, since many operators are already in compliance with these standards as a matter of operating practice." <u>Id.</u> at 0100626.

B. Administrative Record Support - Definition of Usable Waters

The Associations take issue with BLM's determination that the use of a 10,000 ppm TDS limit for the definition of Usable Waters would not impose additional costs on companies because Onshore Order No. 2 already requires that these aquifers be isolated. Dkt # 13 at 36-38. BLM responded that it was reasonable for the agency to assume in its cost estimates that companies are complying with existing law. See Dkt # 20 at 37-38; see also, WildEarth Guardians v. U.S. Fish & Wildlife Serv., 784 F.3d 677, 694 (10th Cir. 2015) (it was reasonable for an agency to assume compliance with applicable regulations when assessing whether project will have significant impact); Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1177 (10th Cir. 1999) (agency may rely on reasonable assumptions when evaluating the economic impacts of a proposed action as long as the agency explains those assumptions).

BLM's use of the existing 10,000 ppm standard has support in the record:

- 1. In its Economic Analysis, BLM determined that the definition "would not impose an incremental cost" because "the term usable water is defined in a manner consistent with existing BLM requirements" in Onshore Order No. 2. Economic Analysis (DOIAR0100522) at 0100583-584.
- 2. Other documents in the administrative record also support BLM's statement that Onshore Order No. 2 is a pre-existing legal requirement. <u>See pp. 5-7</u>, <u>supra</u> (examples indicating that Onshore Order No. 2 is the existing standard).
- 3. Record documents reflect that BLM regulators have been applying this standard. For example, BLM's Wyoming web site (Kemmerer field office) directs that "Oil and gas operators must design the casing and cementing program to protect all mineral zones and design the cementing program to protect usable water (less than 10,000 ppm TDS)." Other documents are similar. See, e.g., DOIAR0009990 at 0010088, 00100128-129, 0010172 (BLM field office

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⁸ http://www.blm.gov/wy/st/en/programs/energy/Oil_and_Gas/Onshore_Operations/apdk.html, paraphrased in Associations' 2013 comments (DOIPS0178933 at 0178957).

manager from Montana reports that 10,000 ppm standard currently being used to protect usable water); DOIAR0009607 at 0009707-708 (Jan. 2012 statement that BLM has "already been using this 10,000" ppm standard); DOIAR0088074 at 0088095 (BLM New Mexico white paper noting that current requirements are designed to isolate usable water).

- 4. Comments indicate that several states and tribes also use a similar standard. <u>See</u> DOIAR0027307 at 0027323 (ConocoPhillips chart indicating that Colorado, Wyoming and New Mexico use 10,000 ppm to define "usable water" or "fresh water," with exemptions similar to those in the final BLM Rule); DOIPS000300 at 0000304 (North Dakota requires that zones with 5,000-10,000 ppm TDS be isolated with cement); DOIPS0065596 at 0065611 ("existing regulations" in New Mexico use 10,000 ppm for defining usable waters); DOIPS0178933 at 0179004 n. 12 (Associations' Comments predicting that wells in northeastern Colorado will likely not require additional casing); DOIPS0004967 at 0004977 (indicating that it does not appear additional casing strings would be required for wells drilled on Southern Ute lands); <u>see</u> also, DOIAR0009607 at 0009708 (Osage tribe using 10,000 ppm standard).
- 5. American Petroleum Institute standards indicate that 10,000 ppm is the industry standard, stating that "at a minimum, it is recommended that surface casing be set at least 100 feet below the deepest USDW." DOIAR0002075 at 0002083; see also id. at 0002078 n. a.
- 6. Comments in the record also indicate that regardless of regulations, companies seek to avoid fracturing into a usable water zone because doing so produces a substantial amount of water that must be disposed. DOIAR0003358 at 0003411, 0003426 (statement by Mark Fesmire, representative of New Mexico Oil Conservation Division).

In their preliminary injunction briefs, the Associations assert that BLM "has not addressed any of the comments in the record" about possible additional costs for drilling test wells to obtain water quality data necessary to apply the 10,000 ppm standard. Dkt # 13 at 36 (estimating that costs could be more than \$100,000 per well if test wells were required); Dkt # 42 at 10; see DOIPS0178933 at 0178958 (Associations' Comments raising same concern). The record does not support the Associations' argument:

- 1. In the final rule, BLM did address the Associations' concern that they would be required to drill test wells in advance, or use drilling logs, to sample the water quality in aquifers. 80 Fed. Reg. at 16151. BLM indicated that such an approach is not required in each case, and the final rule only requires use of the "best available information." <u>Id</u>. at 16151-152, 16218 (43 C.F.R. § 3162.3-3(d)(1)(iii)).
- 2. For example, BLM noted that the water quality information can be collected from existing sources such as state regulators. <u>Id.</u> at 16151-152. It also may be available from U.S. Geological Survey reports. In many cases well logs from previously-drilled oil and gas wells

will be available to provide water quality data for future wells drilled in the same area. <u>Id.</u> at 16152.

3. Record documents indicate that the best available data often only needs to be collected once for each development field, rather than for each well, which reduces the cost per well. An analysis provided by the American Petroleum Institute stated that where existing data can be used on a field-wide basis to assess usable waters, the cost per well would be "negligible." DOIPS0301520 at 0301535.

The Associations also object that BLM did not estimate increased casing and cementing costs that companies might incur to protect additional usable aquifers if they were not previously complying with Onshore Order No. 2. Dkt # 13 at 36-38. Evidence in the record shows that BLM's approach was reasonable.

- 1. Several industry trade groups, including the Associations, offered cost estimates for additional casing and cementing. Their figures were hypothetical estimates based on assumptions that additional casing and cementing "could be" or "may be required" to comply with the usable water definition. See, e.g., DOIPS0178933 at 0178958, 0179004 (Associations' Comments); see also Dkt # 13 at 36-37 (citing same figures in preliminary injunction brief).
- 2. The Associations' 2013 Comments acknowledged that it is "not possible" to determine what usable water zones are not currently being protected in compliance with Onshore Order No. 2. Associations' Comments at 0178958; see also id. at 0179004 n. 10 (report from Associations' economist John Dunham stating that determining exact estimate of additional casing costs to protect usable waters is "not practical" and "nearly impossible"). The Associations instead generated numbers based on unsubstantiated assumptions that thousands of feet of additional casing and cementing could be required to comply with the Rule. Id.⁹
- 3. The Associations also did not present evidence in their preliminary injunction briefing that companies were failing to comply with the requirements of Onshore Order No. 2. See Dkt # 13 at 36-38, 19 n. 21 (Associations citing 1994 state director decision that discussed casing depths but did not address the numeric definition of usable water). In their reply brief, the

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⁹ The record also shows that the Associations' cost figures were based on a misunderstanding about the Rule. The Associations' Comments assumed that the Rule changed the definition of "isolate" from Onshore Order No. 2 to require "cement behind pipe across all usable water zones," which the Associations asserted was an expansion of what Onshore Order No. 2 meant by "isolating." Associations' Comments at 0178956-957. In the final rule and preamble, however, BLM clarified that the Rule's requirement to "isolate" usable waters is intended to be "consistent with the requirements in Onshore Order 2" that have been in existence since 1988. 80 Fed. Reg. at 16152. The final Rule also adds a definition for the term "isolating" that is identical to the definition in Onshore Order No. 2. Compare 80 Fed. Reg. at 16217 (definition in Rule) with 53 Fed. Reg. at 46805 (Onshore Order No. 2 definition).

Associations "presum[ed]" that BLM has been giving companies "directions [] based on the 10,000 ppm TDS standard" in Onshore Order No. 2. Dkt # 42 at 16.

- 4. An analysis submitted by the American Petroleum Institute concluded that "considerable uncertainty" exists, and that the potential additional casing costs to comply with the usable water definition might be zero. DOIPS0301520 at 0301538. The API stated: "It is uncertain whether the current practice provides acceptable isolation of usable water zones under the BLM proposed rule." Id. at 0301528.
- 5. Devon Energy submitted a report from Oklahoma City University in which a computer model was run to estimate the compliance costs for the Rule. The computer modelers made assumptions that additional casing and cementing would be required, but they had no supporting data for those assumptions. DOIPS0365277 at 0365338-339; see also id. at 0365333 (assuming more casing would be required because "the usable water concept seems [] more strict"); Dkt # 13 at 36 (citing same report).
- 6. The Citizen Groups' review of the record did not find evidence identifying any actual violations of Onshore Order No. 2 in constructing wells on federal lands, much less a widespread pattern of noncompliance. Instead, a number of companies and trade associations raised objections that (like the Associations) involved unsubstantiated allegations of higher costs. See, e.g., DOIPS0065596 at 0065597, 611 (2013 comments from New Mexico company relying on Associations' cost estimates, but also showing that "existing regulations" in New Mexico use 10,000 ppm for defining usable waters); DOIAR0045077 at 0045081 (Exxon Mobil comments asserting that usable water definition "will upset long-settled practices" without offering supporting evidence); DOIPS0010821 at 0010843-844 (America's Natural Gas Alliance comments alleging that Rule will be "impractical and unnecessarily burdensome," without providing evidence that protection of usable waters is not already being required).
- Many industry and state comments requested that BLM revise the usable water 7. definition to incorporate state determinations, and the standards of SDWA, on this issue. See, e.g., DOIPS0010561 (comments from Southwestern Energy recommending incorporation of SDWA terms); DOIAR0052905 (North Dakota comments urging BLM to use definition of USDW from EPA regulations); DOIAR0079598 at 0079599 (recommending that BLM respond to comments by incorporating state and tribal determinations into definition). BLM acted on these requests in the final Rule, which expressly incorporates state and tribal determinations that narrow the definition of usable waters. Compare 77 Fed. Reg. at 27709 (2012 draft definition of usable water simply as "generally those waters containing up to 10,000 ppm of total dissolved solids") with 80 Fed. Reg. at 16217-218 (final definition incorporating state and tribal determinations as to waters that do not need to be protected). Similar changes were made in the final Rule to expressly incorporate SDWA standards, as commenters had requested. Id. BLM pointed out that adding exclusions to the definition is "likely to reduce operators' costs" because the exclusions were not part of the existing Onshore Order No. 2 definition. Dkt # 20 at 38 (emphasis original).

As BLM pointed out in briefing, the Associations' disagreement falls far short of showing that BLM's conclusion was arbitrary or unreasonable. Dkt # 20 at 37-39; Helicopter Ass'n, 722 F.3d at 439 (trade association disagreement with agency RFA estimate of number of affected companies failed where association failed to provide evidence to support its "unsubstantiated estimate").

C. Administrative Record Support – Cost To Require Cement Evaluation Logs On Intermediate Casing That Protects Usable Water

BLM also analyzed the costs of the Rule's requirements that seek to ensure adequate well cementing. See Economic Analysis (DOIAR0100522) at 0100584-588; 80 Fed. Reg. at 16219 (43 C.F.R. § 3162.3-3(e)). The Associations challenge one aspect of that analysis: the agency's estimate of the frequency when cement evaluation logs (CELs) will be required on intermediate casing because it is not cemented to the surface. Dkt # 13 at 38-40.

The administrative record does not support the Associations' argument. Instead, it shows that BLM made a reasonable cost estimate for the CEL provision:

In its Economic Analysis, BLM assessed the likely costs of its cement evaluation requirements for surface casing, production casing, and intermediate casing. Economic Analysis at 0100584-588. With regard to intermediate casing, BLM estimated that the costs for a CEL would be \$111,200 per operation. <u>Id.</u> at 0100587. The agency assumed for its analysis that the requirement would impose a CEL cost (\$111,200) for every well where intermediate casing is used to protect usable water and not cemented to the surface, except in three states (Colorado, North Dakota and Texas) where regulations already address the issue. <u>Id.</u> at 0100586-587. BLM estimated based on field experience that this cost would be imposed for five percent of all federal wells outside of those three states. Id.

The Associations challenge BLM's estimate of intermediate casing CELs on two grounds. The Associations question: (a) whether a five percent estimate based on field experience is reasonable; and (b) BLM's prediction of lower costs in Colorado, North Dakota and Texas based on state regulations. Dkt # 13 at 38-40. In response, BLM pointed out that the

Associations offered no contrary evidence calling into question BLM's field experience-based estimate. The agency also argued that the Associations failed to show that their arguments regarding state regulations "would have any appreciable impact" on BLM's cost estimates. Dkt # 20 at 39-41. The record supports BLM's position:

- 1. In making its five percent estimate, BLM explained that when a well is not cemented to the surface, a company "will most often comply with [the Rule] by running a CEL on the production casing" rather than the intermediate casing. Economic Analysis at 0100587 (emphasis added). Only where "the operator plans to conduct the fracturing operation through a production liner that is hung from the intermediate casing" would an intermediate casing CEL be required. Id.
- 2. The Associations criticize BLM's reliance on field experience for its five percent estimate, but they offered no contrary evidence in their preliminary injunction briefing. The Associations also did not address BLM's explanation that most companies are expected to run a CEL on the production casing rather than intermediate casing. See Dkt # 20 at 41 (BLM brief); Dkt # 13 at 38-39 (Associations' brief).
- 3. The Citizen Groups' preliminary review of the administrative record found no documents contradicting BLM's estimate that five percent of wells will have intermediate casing to protect usable waters that would require a CEL.
- 4. The agency also viewed its five percent prediction as likely an <u>overestimate</u> because industry guidance, and the conditions that BLM imposes as a matter of practice, already require CELs for intermediate casing in many cases even without a regulatory requirement (and thus the Rule would not impose an additional cost). <u>Id.</u> at 0100586-587; <u>see also</u> DOIAR0002075 at 0002083 (API standards stating that when installing intermediate casing "[d]epending on the well design, it may be appropriate to run a [cement log] . . . to determine that the cement integrity is adequate"). The agency acknowledged that it lacked credible data on how often that is done in practice, but explained that "[w]e believe that operators will generally run logs on the intermediate casing . . . if they plan to conduct hydraulic fracturing through a production liner that is hung from the intermediate casing, and that states or that the BLM may specify this as a condition of approval even if it is not in regulation." Economic Analysis at 0100607.
- 5. A number of documents support BLM's view that its estimate may overstate the cost of the Rule's intermediate casing CEL requirement because companies are already doing them. For example, a May 2014 BLM information memorandum observed that "[t]here is little disagreement, even among industry groups, that a CEL is the only way to verify adequate cementing of intermediate and production casing, and most operators run CELs on intermediate and production casing as a routine matter." DOIAR0079598 at 0079599.

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- 6. The Associations' own comments make a similar point: "Many intermediate . . . casing strings are not cemented to the surface When cement is not circulated to the surface, operators often run CELs as a means of accurately determining the 'top of the cement'." Associations' Comments (DOIPS0178933) at 0178961.
- 7. Other documents suggest that BLM substantially <u>overstated</u> the cost to perform a CEL on those wells where it is necessary. A 2013 analysis prepared for API estimated the cost to run a CEL on intermediate casing is lower than the \$111,200 predicted by BLM. <u>See</u> DOIPS0301520 at 0301538 (calculating intermediate casing CEL to cost between \$18,000-\$100,000); <u>see also</u> DOIPS0179186 at 0179189 (Petroleum Association of Wyoming estimating that "Costs for CELs can be \$20,000").

The Associations also criticize BLM's estimates that Colorado regulations will make the CEL requirement inapplicable in that state, and that Texas regulations will make it applicable to only 2.5 percent of wells there. Dkt # 13 at 38-39. The record does not support either argument.

- 1. The Colorado rule essentially parallels the BLM's understanding of its own requirement: Colorado requires a cement bond log on all production casing, and requires a log of intermediate casing when a production liner is used. Colorado Rule 317.0 (now Rule 317.p); cited in Economic Analysis at DOIAR 100522, 100576. Given BLM's expectation of how the Rule will apply (see p. 31, supra), the Colorado regulation already requires a cement log on intermediate casing in those situations when the BLM Rule would mandate it. Compare id. with DOIAR0100522, 587.
- 2. In Texas, BLM recognized that state regulations require companies to identify the top of cementing with either a cement bond log or other methods such as a temperature survey. DOIAR0100522, 586. BLM assumed that half of the time companies would use a cement bond log, and accordingly reduced the applicability of the CEL requirement from 5 percent to 2.5 percent. <u>Id.</u> at 0100587. While they question that 50 percent reduction, the Associations offered no evidence to support any other figure. Dkt # 13 at 38-39. Moreover, Texas accounts for only

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¹⁰ BLM also assumed that the intermediate casing CEL requirement would impose no costs in North Dakota because of that state's regulations. Economic Analysis at 0100587. The Associations have not offered any argument challenging the accuracy of that assumption. Dkt # 13 at 38-39; Dkt # 42 at 12-14; see also, DOIAR0070190 at 0070193-194 (industry comments noting that North Dakota requires a CEL "on all intermediate and production casing"); Economic Analysis at 0100580 (same). The Associations do question BLM's statements about California and Wyoming regulations. Dkt # 13 at 39. But the record shows that BLM did not assume that state regulations would reduce the Rule's impact in those two states – instead it assumed that five percent of wells in California and Wyoming would be impacted by the intermediate casing CEL requirement. Economic Analysis at 0100587; Dkt # 20 at 40 (BLM explanation regarding Wyoming and California).

one percent of the well completions on federal lands. DOIAR0100522, 0100580. As a result, BLM pointed out, a different reduction in that state would not "have any appreciable impact on the agency's conclusions" about the cost of this requirement. Dkt # 20 at 40.

The Associations disagree with the agency's estimate that only five percent of wells will require a CEL on intermediate casing. But as BLM noted, they offer no basis in the record to use another figure, and no reason to conclude that BLM's calculation is arbitrary and capricious or not in good faith. The Associations' disagreement with BLM's five percent estimate "is insufficient to call [the agency's] figure into question." Helicopter Ass'n, 722 F.3d at 439; Dkt # 20 at 41 (BLM brief).

D. Administrative Record Support – Mechanical Integrity Tests

The Associations question BLM's conclusion that the requirement to conduct a mechanical integrity test (MIT) of the casing or fracturing string will not impose additional costs on companies. Dkt # 13 at 40-41. The Associations base this on two assertions: (a) that the MIT "is distinct from the casing integrity test that operators now perform", and (b) that testing the full casing on horizontal wells "is a mechanically onerous and expensive proposition." <u>Id.</u>; see also Dkt # 42 at 6-9. BLM's brief responded that the agency had explained what an MIT requires, and that it does not represent a "significant departure from existing practice" for companies. Dkt # 20 at 42-43.

BLM's conclusion is supported by substantial evidence in the administrative record. For example:

1. Onshore Order No. 2 already requires a pressure test on "all casing strings below the conductor." 58 Fed. Reg. at 46809.¹¹ As described above, the MIT required by the new Rule involves different pressures than the existing Onshore Order test. Pp. 3-5, <u>supra</u>. BLM

¹¹ Conductor casing is the uppermost level of casing in a well. It is installed at the surface "to hold back the unconsolidated surface sediments" that are above "harder, more consolidated rock." DOIAR0002075 at 0002082 (API Standards); see also id. at 0002084 (diagram illustrating depth of conductor and other casings).

explained, however, that this distinction does not increase the cost of the test: "A casing pressure test is already required by Onshore Order No. 2. . . . While the test pressure for the MIT may differ from what is required by Onshore Order No. 2, there is no significant increase in rig time required to run the MIT as proposed." 78 Fed. Reg. at 31654.

- 2. BLM received many comments indicating "that the requirement [for such tests] is common industry practice and that they support the requirement." 80 Fed. Reg. at 16161. In determining that the MIT will not impose new costs on companies, the agency's Economic Analysis cited API standards extensively and noted that "industry guidance is consistent with this requirement." Economic Analysis (DOIAR0100522) at 0100561-563, 0100589.
- 3. BLM's Economic Analysis reviewed the regulations of the Nine States accounting for almost all oil and gas development on federal lands and found that all of them provide for MITs or pressure tests of the casing where fracturing occurs. Economic Analysis at 100575-580; see also id. at 0100589 (regulations in those states "either require pressure tests on all casing strings or on the casing strings through which the completion operations will occur"). A number of commenters, in fact, opposed the MIT on the ground that it is "duplicative" of state requirements. 80 Fed. Reg. at 16161.

The Associations also claim that requiring the MIT pressure test is much different on horizontal wells and a more "mechanically onerous and expensive proposition." Dkt # 13 at 40-41. The Associations assert that testing the horizontal leg will increase costs by \$75,000 to \$100,000 for necessary modifications to the pressure test, but concede that there is no evidence in the administrative record to support this claim. Dkt # 13 at 41; Dkt # 42 at 9 n. 3. The administrative record indicates that companies are already doing pressure tests for both horizontal and vertical wells, so that even if testing horizontal wells is more expensive, that would not be a new cost imposed by the BLM Rule. For example:

- 1. As noted above, API standards direct that pressure tests should be performed on production casing before it is hydraulically fractured, and the standards do not suggest that this recommendation is limited to vertical wells. To the contrary, API states that the considerations and recommendations for production casing are the same on vertical and horizontal wells. P. 5, supra.
- 2. State regulations reviewed by BLM require pressure testing of production and other casing, without regard to whether a vertical or horizontal well is involved. See, e.g., Economic Analysis at 0100576 (Colorado Rule 317j [now 317k] requires pressure testing of production casing without limiting requirement to vertical wells); id. at 0100577 (New Mexico

regulations section 19.15.16.10(I) requires pressure testing casing without regard to vertical or horizontal); id. at 0100579 (similar requirement in Wyoming Admin. Code ch. 3 § 22(a)(v)).

- 3. The Associations are incorrect in asserting that the requirement to pressure test production casing on horizontal wells (as opposed to just testing the vertical part of the well) first appeared in the final Rule. See Dkt # 42 at 8-9 and n. 3. In fact, the original rule proposed in 2012 did not limit the MIT requirement to the vertical portion of the well bore. 77 Fed. Reg. at 27710. The language of the 2012 draft rule closely tracks the language in the final Rule. Compare id. (2012 draft) with 80 Fed. Reg. at 16219 (final Rule).
- 4. Industry comments on the 2012 proposal support BLM's view that MIT pressure tests are already established practice. These comments did not express concern about testing horizontal wells. For example, one industry commenter observed that such pressure tests were already required by many states and described them as "a generally accepted standard in the industry." DOIAR0026498 at 0026510-511 (Yates Petroleum comments).
- 5. Other industry comments on the 2012 proposal are similar. API, for example, did not object to the 2012 MIT language and commented that "pressure tests . . . have long been mandated . . . by the states." DOIAR0028535 at 0028550; see also id. at 0028555 (no comments on proposed Section 3163.2-3(d), which contained MIT requirement); DOIPS0008285 at 0008294 (Black Hills Energy commenting that "successful MITs are already completed as a matter of industry practice" and referring to them as an "accepted and followed industry standard"); DOIPS0010821 at 0010875-76 (America's Natural Gas Alliance comments stating that "States require pre-hydraulic fracturing pressure testing" and the MIT proposal "is duplicative of existing state regulations and well-established industry practice"); DOIPS0010367 at 0010377 (BP supports MIT requirement).

As these citations illustrate, BLM's determination that the MIT requirement will not impose additional costs on companies is reasonable and supported by evidence in the administrative record.

E. Administrative Record Support – Requirement To Use Tanks

The Associations criticize BLM's estimate of the compliance costs associated with the requirement to store recovered fluids in tanks. Dkt # 13 at 41-45. The administrative record

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¹² The 2012 draft referred to "well stimulation" rather than hydraulic fracturing because the draft would have applied both to fracturing and to other well stimulation techniques like acidization. See 77 Fed. Reg. at 27709 (defining "well stimulation"). While the final Rule is limited to hydraulic fracturing, the language of the MIT requirement is otherwise almost identical to the 2012 draft proposal. Compare id. at 27710 (2012 draft) with 80 Fed. Reg. at 16219 (final Rule).

supports BLM's position that it made a reasonable, good faith effort to estimate the costs of this requirement, and that the estimate was not arbitrary and capricious. Dkt # 20 at 45-46.

- 1. BLM's Economic Analysis contains a detailed assessment of the cost of the Rule's tank requirement. Economic Analysis (DOIAR0100522) at 010590-600. BLM calculated that the incremental cost would be \$74,400 per operation, but that would only be incurred where: (a) state rules do not require tanks and where (b) companies are not already using tanks voluntarily because they are less expensive than pits. Economic Analysis at 0100599. For this assessment, the agency surveyed the rules of the Nine States regarding pit requirements. Id. at 0100575-580, 0100599. BLM also estimated voluntary compliance by calculating on a state-by-state basis the percentage of operations where tanks cost less than pits. This calculation incorporated public comments, used data from FracFocus and Halliburton to assess the volume of recovered fluids per well in each state, and obtained data from service providers on the costs of tanks. Id. at 0100593-599. In addition, BLM collected observations of field operations to assess the prevalence of tanks in eight of the main federal producing states. Id. at 0100591-592.
- 2. Based on this methodology, the agency estimated that the Rule would affect 28 percent of operations in Colorado, 20.4 percent in Montana, 24.9 percent in North Dakota, 38 percent in Oklahoma, and 7.7 percent in Wyoming, but not affect any operations in certain states such as New Mexico and Texas. <u>Id.</u> at 0100599. BLM determined that the requirement would cost \$5,544 per operation when averaged across all wells, with total costs ranging from \$15.6 million to \$23.7 million. Id. at 0100614.
- 3. In their 2013 comments, the <u>Associations did not dispute BLM's cost calculation</u> for the tanks requirement. The Associations estimated that the total additional cost of requiring tanks instead of pits would be \$19.6 million, a figure falling well within the \$15.6-\$23.7 million range estimated by BLM. Associations' Comments (DOIPS0178933) at 0178948. Some other industry parties also submitted the Associations' figure with their comments. <u>See, e.g.</u>, DOIAR0056854 at 0056940 (Devon Energy); DOIPS0365610 (Colorado Petroleum Association).

In contrast to their earlier comments, the Associations' preliminary injunction briefing criticizes BLM's calculations. But as BLM noted (Dkt # 20 at 44), the Associations' own arguments demonstrate that, if anything, BLM <u>overstates</u> the likely cost of the tank provision. The Associations assert that the tank requirement will never apply because companies can circumvent it by obtaining an approved water disposal plan in place before commencing fracturing operations. Dkt # 13 at 11-12. If the Associations are correct, the requirement will impose no costs on small companies. Even if only some companies take this approach, it will

substantially reduce the cost of the tank requirement. The Associations cannot credibly claim that a substantial number of small companies will face a significant cost from a tank requirement while also asserting that the requirement will rarely if ever apply. Dkt # 20 at 44 (BLM making this point).

Disregarding this inconsistency, the Associations challenge BLM's cost estimates on two grounds. First, the Associations claim that in some cases pits are used instead of tanks for reasons other than cost (such as environmental protection), making it incorrect for BLM to assume in its analysis that companies would voluntarily use tanks when they were less expensive than pits (so the Rule would not impose new costs in such cases). Second, the Associations allege that BLM improperly assumed the tank requirement would impose no costs in Texas and New Mexico, because existing regulations in those states allow tanks to be used in some circumstances. Dkt # 13 at 43-44. The record does not support these arguments:

- 1. The Associations did not offer any evidence in their preliminary injunction motion indicating that companies frequently use pits where they cost more than tanks, or that such a choice occurs at any significant number of sites. See Dkt # 13 at 43-44; Dkt # 42 at 5-6.
- 2. The Citizen Groups' preliminary review of the record did not find any evidence showing that companies commonly use pits where they cost more than tanks. Instead, industry comments typically focus on the additional costs associated with tanks, see, e.g., Associations' Comments at 0178976-977; DOIPS0179205 at 0179208-209 (ConocoPhillips), or address inapplicable anecdotes. See DOIAR0056854 at 0056881-882 (Devon Energy comments discussing large recycling facility rather than well site).
- 3. The Rule accommodates situations where genuine environmental or land protection issues require pits for reasons other than cost. <u>See</u> 80 Fed. Reg. at 16220 (43 C.F.R. § 3162.3-3(h)(1)) (allowing BLM to approve lined pits where tanks are "infeasible for environmental, public health or safety reasons" subject to additional protective conditions). In such cases, companies can get BLM approval to use pits.
- 4. The Associations also assert that it was arbitrary and capricious for BLM to assume that the Rule will not impose additional costs on operations in Texas and New Mexico because the regulations in those states do allow use of pits in some circumstances with agency approval. Dkt # 13 at 43-44. However, BLM's Economic Analysis also shows that most companies in those two states would voluntarily use tanks on the basis of cost, regardless of state

regulations. In New Mexico, BLM estimated a voluntary compliance rate of <u>more than 96</u> <u>percent</u>. In Texas, the rate is over 64 percent. Economic Analysis at 0100598. These figures suggest that the Rule's tank requirement would have a minimal impact in those states, regardless of existing state regulations.

The administrative record shows that BLM's cost calculations were not arbitrary and capricious. Dkt # 20 at 43-45; Helicopter Ass'n, 722 F.3d at 439.

F. Administrative Record Support – Administrative Costs

BLM anticipated that the required applications for hydraulic fracturing approvals can be processed with little additional delay and will impose only modest costs. Economic Analysis (DOIAR0100522) at 0100582-583, 0100614. The Associations question these conclusions. Dkt # 13 at 45-47. But the administrative record supports BLM's assessment. For example:

- 1. BLM estimated that the administrative costs associated with fracturing approvals will be minimal (\$643 per application) because the required information "should be readily available or known to the operator." Economic Analysis at 0100582-583, 0100614.
- 2. To streamline the process and avoid delays, the Rule allows companies to seek approval of hydraulic fracturing operations as part of the existing drilling permit process, 80 Fed. Reg. at 16218 (43 C.F.R. § 3162.3-3(c)(1)), in which case no new delays would result. The preamble states "BLM believes that the additional information that would be required by this rule would be reviewed in conjunction with the [application for permit to drill (APD)] and within the normal APD processing timeframe." Id. at 16177.
- 3. In addition, the Rule allows a company to submit a "master hydraulic fracturing plan" (MHFP) to obtain approval for fracturing multiple wells. <u>Id.</u> at 16217-218 (43 C.F.R. §§ 3162.3-3(c)(3), 3160.0-5). In the preamble, BLM explained that an MHFP allows BLM to "frontload" and "streamline" the approval process for hydraulic fracturing operations, which should avoid delays. Id. at 16147-48.
- 4. BLM did acknowledge in the preamble that "further processing time should be expected" if companies fail to take advantage of either of the procedures described above. <u>Id.</u> at 16177. But the preamble estimated that applications would require "only 4 hours of additional review time" by agency staff. <u>Id.</u> at 16196. "This does not present a measureable delay in processing time." Id.

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¹³ Moreover, the record shows that Texas accounts for only one percent of well completions on federal and indian lands. Economic Analysis at 0100580. As a result, any impact of the requirement in that state will have only a minimal impact on the total cost of Rule.

- 5. Many industry comments expressed concern about delays associated with pre-fracturing approvals, but most did not offer specific estimates that differed from BLM's assessment. One analyst recognized that attempting to predict the additional delays associated with the new Rule "would be purely guesswork on my part." DOIPS0004967 at 0004977 (2012 Southern Ute Indian Tribe comments on initial draft rule).
- 6. The few industry comments that offered specific estimates about administrative delay and expense support BLM's determination that the Rule will not have a significant economic impact on companies. For example, the Associations' Comments predict that the processing times will not result in a significant cost. In those comments, the Associations' economist stated that it would be "not unreasonable" to expect that getting fracturing approvals would require a week hardly a lengthy delay. Even under more pessimistic assumptions, the Associations estimated that the approvals could require a month. Associations' Comments (DOIPS0178933) at 0179002; see also DOIAR0022984 at 0022988 (similar estimates for 2012 draft rule). Under either assumption, the Associations calculated that the cost of delay to their members would be minimal: only \$1,580 \$6,770 per well, which amounts to just 0.018-0.12 percent of the cost of drilling a well. Associations' Comments at 0179002; 80 Fed. Reg. at 16205.
- 7. Similarly, Anadarko submitted comments that assumed a seven-week (49 day) delay, without explaining the basis for that estimate. But even with such a longer assumption, the company calculated that the draft Rule would cause it to incur only \$11,000 in delay costs, plus \$500 for administrative expenses, per well. DOIPS0007965; DOIPS0007968 at 0007983. These costs amount to 0.2 percent or less of the cost of drilling the well.
- 8. BLM also plans to hire additional staff for implementing the Rule, which will further minimize any delays. DOIAR0110490 at 0110491.

In their preliminary injunction briefing, the Associations assert that companies will not take advantage of the mechanisms to avoid delays (such as MHFPs or submitting fracturing applications with APDs) because fracturing "designs can change" during the period when drilling permits are being processed. Dkt # 13 at 46. BLM responded that based on its experience, "operators would normally submit requests to conduct hydraulic fracturing operations with APDs," and the Associations' disagreement with that expectation does not render BLM's approach arbitrary and capricious. Dkt # 20 at 45. The agency also pointed out that the Associations have failed to show that the issues they raise "would have any appreciable

impact on [BLM's] overall conclusions" that administrative costs will not be significant. Dkt # 20 at 45. The administrative record supports BLM's argument:

- 1. The rule accommodates adjustments in the fracturing operation by requiring only "estimated" or "anticipated" figures for a variety of components of the application, such as the volume of fluid used, anticipated pressure ranges, and the direction and length of fractures to be induced. 80 Fed. Reg. at 16147, 16218-219 (43 C.F.R. § 3162.3-3(d)). This allows BLM to review and evaluate the safety of the planned operation, while giving companies the flexibility to make adjustments as they implement it.
- 2. Even if there are some cases where changes must be made later, a previously-approved MHFP (or approval obtained with an APD) will "frontload" the bulk of the analysis and substantially narrow any issues and review time for later adjustments. <u>See</u> 80 Fed. Reg. at 16147; Lead Case Dkt # 67 at 18-19.
- 3. Comments by a petroleum industry expert note that concern over possible changes (and compliance costs) are likely to decrease over time, because there are very few well completion companies (e.g. Halliburton, Schlumberger) and they conduct numerous similar operations. In doing so, the process becomes routinized as companies establish regular practices for completing wells in a given area. DOIPS0010240 at 0010241.

IRREPARABLE HARM, BALANCE OF EQUITIES AND PUBLIC INTEREST

The record also does not support the argument by the Associations and States that they will suffer irreparable harm in the absence of an injunction. Nor does the record show that the balance of equities and public interest support an injunction.

I. IRREPARABLE HARM

A. Compliance Costs And Administrative Delays

The record does not show that the Associations' members will be irreparably harmed by the cost of complying with the Rule or by administrative delays:

1. BLM assessed the compliance costs as \$11,400 or less per well, representing 0.13-0.21 percent of the cost of drilling a well. As BLM argued, that figure is supported by the record and reasonable. Pp. 25-40, supra; see also, Dkt # 13 at 48 (Associations rely on \$11,400 figure as basis for claim of irreparable harm). As discussed in briefing, such minor compliance costs do not represent irreparable harm. Dkt # 34 at 8-11.

2. BLM's Economic Analysis also concluded that, even for small companies, the costs of complying with the Rule would amount to only 0.15 percent of their <u>net incomes</u>. P. 25, <u>supra</u>.

The administrative record also does not support the claims by North Dakota, Wyoming and Colorado that the Rule will cause them irreparable harm from a significant loss in mineral and tax revenues. See Lead Case Dkt #32-1 at 16-22; Lead Case Dkt # 52-1 at 10-16.

- 1. BLM concluded in its preamble and Economic Analysis that the minor costs associated with the Rule would not significantly affect companies' investment decisions regarding public lands. 80 Fed. Reg. at 16209-210; DOIAR0100522 at 0100620.
- 2. BLM, the Associations, and Anadarko all estimated that delay-related costs would represent only a very minor percent of the cost of drilling each well. Pp. 38-39, <u>supra</u>.
- 3. The Citizen Groups' preliminary review of the administrative record found nothing (other than conclusory assertions) supporting the States' predictions that the Rule will significantly reduce oil and gas drilling on public lands. See, e.g., DOIPS0301997 at 0301998 (2013 Wyoming comments predicting "exodus of oil and gas development from public lands" without supporting evidence); DOIPS0071487 at 0071488 (similar 2013 comments from New Mexico). As the Citizen Groups argued, such conclusory assertions do not establish a likelihood of irreparable harm to the States. Lead Case Dkt # 67 at 19-21.

The record also refutes North Dakota's assertion that the Rule would (a) require a sixmonth delay in all oil and gas development on federal and Indian lands, and (b) thus cut North Dakota mineral development in half. In its preliminary injunction briefing, North Dakota offered no explanation for its prediction of a six-month delay. See Lead Case Dkt # 52-4 ¶¶ 14-15. At the June 23 hearing, however, North Dakota witness Lynn Helms testified that the delay would result because state regulations required his agency to keep certain information confidential for six months after a well is drilled. June 23 tr. at 49:24-50:10, 56:18-57:8. This six-month confidentiality rule, he claimed, would preclude disclosure of certain information about nearby wells to BLM that is required by the new BLM Rule for fracturing approvals and thus delay all federal and indian oil and gas development by at least six months. June 23 tr. at 49:24-50:10, 56:18-57:8; Lead Case Dkt # 52-4 ¶¶ 14-15 (Helms declaration). North Dakota then predicted a

"cascading" series of impacts resulting from that alleged six-month delay that allegedly would cost the state billions of dollars. Lead Case Dkt # 52-1 at 12-14.

The record, however, does not support North Dakota's theory:

- 1. North Dakota expressed no such concern in its administrative comments. In discussing BLM's proposal to require prior approval for fracturing, North Dakota made no mention of its six-month confidentiality regulation. DOIPS0000300; see also DOIAR0052905. In fact, the State's comments suggest that BLM accept information filed with and required by the state for this purpose. DOIPS0000300 at 0000301.
- 2. As pointed out at the hearing (June 23 tr. at 213:25-215:20), the state regulation relied on by Mr. Helms, N.D. Admin. Code § 43-02-03-31, provides ample flexibility to avoid a conflict with BLM's Rule. First, the state regulation imposes the six-month confidentiality period only "if requested by the operator in writing." Id. In many cases (such as the hypothetical example used by North Dakota at the hearing) the wells in question are being drilled by the same operator. In such cases, the operator can simply provide the information to BLM itself. The operator also can authorize disclosure of the information by North Dakota to BLM. See June 23 tr. at 213:25-215:20 (discussing this point).
- 3. Where the applicant for BLM approval is not the operator of nearby wells drilled within the last six months, North Dakota's regulation still can accommodate BLM's requirements. The regulation allows the state commission to release confidential information to "federal . . . environmental and public health regulators if the [Commission] director deems it necessary to protect the public's health, safety and welfare." N.D. Admin. Code § 43-02-03-31. This language allows North Dakota to provide any necessary confidential information to BLM so that the federal agency can do its review and ensure that frack hits and other accidents will not result. See June 23 tr. at 213:25-215:20. BLM's own regulations allow it to maintain the confidentiality of such information for the rest of the six-month period. See pp. 21-23, supra.
- 4. Similarly, North Dakota can grant exceptions to its rules "when such exceptions will result in the prevention of waste and operate in a manner to protect correlative rights." ND Admin. Code § 43-02-03-02. If deemed necessary, the state can issue a exception authorizing the transmittal of information to BLM on terms providing that BLM will maintain its confidentiality. June 23 tr. at 213:25-215:20. Such an exception is consistent with North Dakota's regulatory scheme, which provides that "the commission recognizes that all persons drilling and producing on United States government land shall comply with the United States government regulations." ND Admin. Code § 43-02-03-07.

¹⁴ North Dakota's six-month confidentiality rule is promulgated based on a statute stating that the "Commission has the authority: . . . (6) [t]o provide for the confidentiality of well data reported to the commission if requested in writing by those reporting the data for a period not to exceed six months." ND Cent. Code § 38-08-04(6). Nothing in the statute prescribes particular terms for the confidentiality rule or precludes the Commission from granting exceptions from it.

B. BLM Disclosure Of Confidential Information To The Public

In their preliminary injunction motion, the Associations asserted that allowing the Rule to take effect will irreparably harm them because BLM may disclose to the public confidential information submitted for compliance with the Rule. Dkt # 13 at 49. BLM and the Citizen Groups responded that the Associations have not shown that any protected information would be improperly released by the agency. Instead, they pointed out that Associations only speculate about what "could happen, if BLM were to disregard applicable statutes and its own regulations and policies." Dkt # 20 at 49. This speculation does not represent the imminent harm required for an injunction. Id.; Dkt # 34 at 8-10. Moreover, if a dispute later arises over whether certain information is protected from public disclosure, that would involve a subsequent decision by BLM staff for which well-established procedures exist to protect the interests of the company submitting the information. Dkt # 20 at 48-49; Dkt # 34 at 10-11.

The administrative record shows that an injunction preventing the Rule from taking effect is not needed to prevent irreparable harm to the Associations' members:

- 1. As noted above, BLM declined to include new requirements in the Rule providing public notice or disclosure of information submitted with hydraulic fracturing proposals. P. 21, supra.
- 2. Instead, the preamble states that under the Rule "[a]s with any submission of information to a Federal agency, the submitter 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 16173; see also id. ("The Rule provides the same procedural safeguards for hydraulic fracturing information as for all other information obtained by the" agency).
- 3. In response to comments, BLM explained that the normal FOIA exemption framework will be applied to information submitted to comply with the Rule. DOIAR0110490 at 110494; DOIAR0068164 at 0068167.
- 4. Emails between BLM staff also state that where geological information included in an APD falls within the scope of FOIA exemptions 4 or 9, BLM "ha[s] no intention of posting this type of information or routinely making it public." DOIAR0079620; see also

DOIAR0083062; DOIAR0026883-887 (explaining how BLM uses the FOIA exemptions framework to evaluate confidentiality of exploratory well information).

The Associations focus on the preamble statement that BLM believes some of the information submitted before hydraulic fracturing "would not routinely meet" the criteria for exemption from disclosure under FOIA. Dkt # 13 at 29. But the record shows that an injunction is not needed to prevent irreparable harm from any potential later disagreement between BLM and companies over particular claims of confidentiality:

- 1. The Citizen Groups' review of the administrative record found nothing to indicate that (if there is a disagreement) BLM plans to disclose information to the public that companies have marked "confidential" without following its normal regulations and procedures. See, e.g., 78 Fed. Reg. at 31660 (noting that FOIA regulations provide for ten-day notice when disagreement exists over disclosure). 15
- 2. The preamble does indicate that BLM anticipates "exploring" ways to provide information from fracturing proposals to the public "consistent with the requirements of Federal law." 80 Fed. Reg. at 16182. Possible mechanisms may include using BLM's national database or modifying the agency's existing public notice procedures for APDs in order to accommodate the new approval process. DOIAR0078769 (spreadsheet line 9 discussing options, including APD posting or modifications to national database).

¹⁵ At the June 23 hearing, Court inquired about which BLM regulation addresses confidential information outside of the context of a FOIA request. Section 3100.4 of BLM's regulations, 43 C.F.R. § 3100.4, provides that "if you submit data and information [under a range of parts of title 43 that includes 43 C.F.R. § 3163.3] that you believe to be exempt from disclosure to the public," the submitter should mark each page as confidential, and "BLM will keep all such data and information confidential to the extent allowed by section 2.13(c) of this title." 43 C.F.R. § 3100.4(b). Section 2.13(c) exempts from disclosure "Trade secrets and commercial or financial information obtained from a person and privileged or confidential." 43 C.F.R. § 2.13(c)(4) (1998). In addition, application of the federal Trade Secrets Act, 18 U.S.C. § 1905, does not depend on whether a FOIA request is involved. Thus, applicable laws address trade secrets and confidential information both in the ordinary course of operations, and when a FOIA request is received. Nothing in the new Rule purports to change that protection.

¹⁶ Currently, BLM posts APDs in a room at the relevant field office, or on the office's web site, for public review. 80 Fed. Reg. at 16134. Companies commonly submit confidential information to BLM as part of the existing APD package, and BLM's order governing that posting process directs that "The BLM . . . will not post confidential information." 72 Fed. Reg. 10308, 10334 (Mar. 7, 2007) (Onshore Order No. 1).

Whatever mechanism BLM later uses will involve a separate decision where the agency presumably will take the Associations' confidentiality concerns into consideration, and that the Associations or their members can challenge if necessary. An injunction against the Rule is not needed to prevent irreparable harm. Dkt # 34 at 8-11.

II. BALANCE OF EQUITIES AND PUBLIC INTEREST

The administrative record also shows that the balance of equities does not support a preliminary injunction, and an injunction would not be in the public interest. First, the Rule will result in only very modest costs to the Petitioners:

- 1. Compliance costs represent only 0.13-0.21 percent of the cost of drilling each new well. Pp. 40-41, <u>supra.</u>
- 2. Even for small companies, BLM calculated that compliance costs represent only 0.15 percent of net incomes of those companies. Id.
- 3. BLM and industry estimates also show that processing delays for approvals of fracturing operations will represent only a minimal expense for companies. Pp. 38-39, <u>supra</u>.
- 4. There appears to be no evidence in the record (other than conclusory assertions) supporting the States' predictions that the Rule will cause an exodus of oil and gas development away from public lands. P. 41, <u>supra</u>.

On the other side of the scale, the record indicates that the Rule is likely to provide substantial environmental and public benefits. <u>See pp. 8-21, supra;</u> Dkt # 34 at 11-32. For example:

- 1. During the period this case is being litigated, the Rule will apply to the drilling and completion of thousands of new oil and gas wells. 80 Fed. Reg. at 16130 (estimating Rule will affect 2,800-3,800 operations per year).
- 2. The Rule will limit the use of pits, which the administrative record shows have caused many leaks and accidents that contaminate soil and groundwater, as well as numerous bird kills. Pp. 15-16, <u>supra</u>.

- 3. Based on estimates in the record of the rates of cementing and casing failures, applying the Rule's well construction provisions to thousands of new wells while this case is pending will address more than 100 well construction defects. Pp. 16-17, <u>supra</u>.
- 4. Substantial other evidence in the record documents the environmental and public benefits supporting the Rule. Pp. 8-21, supra; Dkt # 34 at 7-8, 11-32.

CONCLUSION

The administrative record citations above support the arguments of BLM and the Citizen Groups that no preliminary injunction should issue.

Dated: September 18, 2015

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CERTIFICATE OF SERVICE

I hereby certify that on this 18th day of September 2015 a copy of the foregoing **RESPONDENT-INTERVENORS' ADMINISTRATIVE RECORD CITATIONS IN OPPOSITION TO PRELIMINARY INJUNCTIVE RELIEF** 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/ Michael S. Freeman