### NEPA REVIEW OF FRACKING LEASES ON PUBLIC LANDS

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The opinion of the federal district court in the case described herein illustrates the procedural nature of federal judicial review in determining whether an agency has adequately considered the environmental impacts of a proposed action under the Administrative Procedures Act (APA) and the National Environmental Policy Act (NEPA). In this particular instance, the federal court describes a controversy involving the environmental impact of proposed fracking (i.e., hydraulic fracturing) on public lands. In recent years, this ongoing controversy over fracking on public lands has also included parks, in particular state parks in Ohio, as well as national parks.

SEE: <a href="http://ecowatch.com/2012/fracking-state-parks/">http://ecowatch.com/2012/fracking-state-parks/</a> http://www.npca.org/about-us/center-for-park-research/fracking/

In the case of *Center for Biological Diversity v. Bureau of Land Management*, 2013 U.S. Dist. LEXIS 52432; 43 ELR 20076 (N.D. Cal. 3/31/2013), several environmental groups, including the Sierra Club, challenged the decision of defendants Bureau of Land Management ("BLM") and Interior Secretary Ken Salazar to sell four oil and gas leases for approximately 2,700 acres of federal land in Monterey and Fresno counties. Plaintiffs alleged the leases were sold in violation of the National Environmental Policy Act because the BLM had not adequately considered the environmental impacts of fracking.

Fracking fractures a rock layer by injecting large quantities of water and fracturing fluids at high volume and pressure. This fractures the geological formation, creating passages through which gas and liquids can flow and an overall increased permeability. Fracking typically uses "slick water," which is a mixture of water, sand, and a cocktail of chemical ingredients with a number of purposes, including increasing viscosity of the fluid and impeding bacterial growth or mineral deposition.

Advocates for fracking herald the technology as an economic method to meet our nation's energy needs by extracting vast amounts of formerly inaccessible hydrocarbon supplies. Fracking opponents, however, warn of devastating environmental impacts, including contamination of ground water, deteriorating air quality, the flowbacks of gases and slick water, and surface pollution from spills.

The Congressional Committee on Energy and Commerce launched an investigation to examine the chemicals used in hydraulic fracturing from 2005 to 2009 and identified twenty-nine chemicals that are known or possible human carcinogens, regulated under the Safe Drinking Water Act as risks to human health, or listed as hazardous air pollutants under the Clean Air Act. In recent years, fracking has come under scrutiny in federal, state, and local governments alike, with some states contemplating enacting, or having already enacted, laws banning fracking altogether. Others have authorized fracking on public lands, including parks.

**APA REVIEW** 

In reviewing an agency determination under the Administrative Procedures Act (APA), based upon the administrative record, the federal court will determine whether the agency's "decision was based on consideration of the relevant factors, or whether its actions were arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law." In so doing, judicial review of agency actions under the APA is "deferential to the agency's recognized expertise in the field," but the role of the federal court is not to "rubber-stamp agency decisions."

Within the context of APA review of agency actions under NEPA, the federal court must "ensure that the agency has taken a 'hard look' at the environmental consequences, carefully reviewing the record to ascertain whether the agency decision is founded on a reasoned evaluation of the relevant factors." In so doing, within the context of this particular case, the federal court would not consider the larger "policy question" of whether fracking is "a good or bad thing." Resolution of such broader policy issues is better left to the political process in Congress, rather than the federal courts.

## NEPA PRIMER

With the goal of declaring "a national policy which will encourage productive and enjoyable harmony between man and his environment," the National Environmental Policy Act ("NEPA") establishes two concrete mandates for federal agencies:

First, it places an obligation on federal agencies to take a "hard look" at "every significant aspect of the environmental impact of a proposed action."

Second, it requires the agency to inform the public that it indeed has taken environmental considerations into account before taking action. This is accomplished by requiring federal agencies to prepare a detailed EIS [environmental impact statement] for all proposals of major federal actions "significantly affecting the quality of the human environment."

The federal regulations implementing NEPA explicitly require that review under the NEPA process be timely. Agencies are required to conduct this review at the "earliest possible time" to allow for proper consideration of environmental values and "head off potential conflicts." This ensures that the environmental impact statement can make an "important contribution to the decisionmaking process" and will not merely be used to justify a decision that has already been made. A review should be prepared at a time when the decisionmakers "retain a maximum range of options." The obligation to produce a review arises when there is any "irreversible and irretrievable commitments of resources."

The "basic thrust" of NEPA is to require that agencies consider the range of possible environmental effects before resources are committed and the effects are fully known. Reasonable forecasting and speculation is thus implicit in NEPA, and federal courts will reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as "crystal ball inquiry."

NEPA requires an EIS (i.e. environmental impact statement) to include a statement of "any

irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(C)(v) If the proposed action does not categorically require the preparation of an EIS, the agency must prepare an EA (environmental assessment) to determine whether the action will have a significant effect on the environment.

If the agency finds based on a less formal and less rigorous environmental assessment (EA) that the proposed actions will not significantly affect the environment, the agency can issue a finding of No Significant Impact (FONSI) in lieu of the EIS. The FONSI must contain a convincing statement of reasons why the project's impacts are insignificant. The statement of reasons is crucial to determining whether the agency took a "hard look" at the potential environmental impact of a project. Standing together, the FONSI and EA must be sufficient to establish the reasonableness of the decision not to prepare an EIS.

In evaluating the significance of the impact of the proposed action, the agency must consider both the context of the action as well as the intensity. For site-specific actions, significance usually depends on the impact of the action on the locale, rather than the world as a whole. Intensity is determined by scrutinizing the following ten factors listed in the Code of Federal Regulations (40 C.F.R. § 1508.27):

- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- (2) The degree to which the proposed action affects public health or safety.
- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, State, or local law or

requirements imposed for the protection of the environment.

The presence of any one of these factors may be sufficient to require an EIS. To prevail on a claim that the agency violated its statutory duty to prepare an EIS, a plaintiff need not show that significant effects will in fact occur. It is enough for the plaintiff to raise substantial questions whether a project may have a significant effect on the environment.

NEPA requires federal agencies to evaluate all reasonably foreseeable environmental effects of its actions. These include both direct effects, caused by the action and occurring at the same time and place, and indirect effects, which are caused by the action and are either later in time or farther removed in distance, "but are still reasonably foreseeable." The test of whether an effect is reasonably foreseeable is whether there is a "reasonably close causal relationship" between the agency's action and the environmental effect.

A comprehensive programmatic impact statement might eliminate the need for a subsequent sitespecific or project-specific environmental impact statement, unless "new and significant environmental impacts arise that were not previously considered."

#### **NEPA REMEDY**

To remedy a violation of NEPA, the federal court may enjoin (i.e. prohibit) the proposed federal action until an adequate environmental review is completed. In so doing, the aim of the federal court is to "approximate what would have happened had the agencies used the proper procedures" in conducting the required environmental review process under NEPA.

In most instances, a successful NEPA challenge will merely delay, but not prevent a proposed federal action. However, during the time required for an adequate environmental review to be conducted, the proposed federal action may be subject to increased public scrutiny and political pressure to adopt an alternative which is more responsive to environmental concerns. Moreover, if the required environmental review process requires a lengthy environmental impact statement (EIS), as opposed to be brief environmental assessment (EA), the required time period for completion could be quite long, allowing more opportunity for public comment and activism to seek redress for environmental concerns.

That being said, an EIS is the exception, rather than the rule. Most proposed projects satisfy NEPA with an EA, or an existing agency "categorical exclusion" (CE) which exempts typically insignificant and routine agency actions from the environmental review process.

### BLM EA/FONSI

In June 2006, BLM prepared an Environmental Impact Statement (EIS) to govern management of the Southern Mountain Diablo Range and Central Coast of California. Based on a survey of past oil and gas activities within the area, the EIS projected that no more than 15 wells would be drilled within the next 15-20 years.

Based on findings in the EIS, BLM established certain management requirements for activities

and projects expected to take place on the lands at issue, including mitigation requirements and oil and gas stipulations that would be applied to new leases issued. These stipulations and conditions included measures to protect endangered, threatened, and other special status species, as well as water and air quality.

Several years later, in response to expressions of interest from members of the oil and gas industry, BLM proposed a competitive oil and gas lease sale for approximately 2,700 acres of the area covered by the earlier EIS. In conjunction with this proposal BLM issued a corresponding draft Environmental Assessment ("EA").

During the 36-day public comment period for the EA, BLM received comments from several individuals, agencies, and organizations, including Sierra Club, Center for Biological Diversity, Monterey County, United States Fish and Wildlife Service Ventura Field Office, Ventana Conservation and Land Trust, Grassroots Coalition, and the National Resources Defense Council (NRDC).

Many comments centered on the potential effects of fracking. In June 2011, having considered and addressed the public comments it received, BLM issued its final EA. The EA did not discuss fracking in great detail beyond noting that it was "not relevant to the analysis of impacts... because the reasonable foreseeable development scenario anticipates very little (if any) disturbance to the human environment." BLM decided to delay its analysis of the impacts of fracking until applications for a permit to drill were submitted. According to BLM, analyzing site-specific impacts would be more feasible at that time.

The EA did, however, briefly discuss "existing credible scientific evidence" concerning fracking, including a 2010 quote from the U.S. House of Representatives Appropriation Conference Committee, which identified the need for a focused study on the potential impact of fracking on "drinking water, human health, and the environment."

In March 2010, the EPA announced that it would study the potential impacts of fracking on drinking water, and that although so far there was no direct evidence of contamination of drinking water due to fracking, there is potential risk for contamination because fracking brings certain fluid chemicals and naturally occurring materials in the geologic formation to the surface where it could mix with water sources.

Relying on the analysis contained within the EA, in June 2011, BLM executed a Finding of No Significant Impact (FONSI), i.e., the proposed action would not result in any significant environmental impact requiring further analysis under NEPA. Following issuance of the final EA and FONSI, BLM issued its decision to offer eight parcels encompassing 2,703 acres for competitive oil and gas lease auction. In so doing, BLM emphasized once again that a further NEPA review would be conducted when applications to drill were received for particular leases.

# LEASE SALE PROTESTS

Before the BLM lease sale took place, environmental groups and nearby municipalities expressed concern over the potential impacts of the lease sale. The lease areas within Monterey

County are part of the Salinas River watershed and play an important role in recharging fresh water aquifers. In a letter to BLM, Monterey County voiced its concerns about substantive deficiencies in the Environmental Assessment, including "the potential to induce seismic activity and the lack of scientific study related to potential impacts to drinking water and groundwater."

After the issuance of the Decision Record, Plaintiffs filed a protest of the lease sale, asserting that BLM's EA was inadequate and that a detailed environmental impact statement (EIS) was required. BLM dismissed the protest, providing a rationale for its decision.

BLM successfully auctioned and issued four leases with "standard" stipulations for Endangered Species and Cultural Resources. A lessee generally had the right to develop a lease, but BLM retained the authority to require proposals to be relocated or redesigned in such a way as to protective sensitive resources.

Accordingly, if NEPA analysis was postponed until the application process to drill a well, already leased, the environmental groups argued that BLM could not deny drilling rights if it found actual drilling would "severely impact water, air, or other non-endangered wildlife species." The federal district court agreed.

As noted by the court, "BLM may have some ability to require mitigation or relocation of the activity, but it will not be able to unilaterally deny the permit." As a result, the court found the leases at issue constituted a "point of commitment" under NEPA "because the government no longer has the absolute ability to prohibit potentially significant impact on the surface environment." The federal district court, therefore, held "BLM was required to conduct a thorough NEPA analysis to determine whether the sale would have a substantial environmental impact."

# SIGNIFICANCE OF IMPACT

BLM had contended "its EA and FONSI established convincing reasons that there would be no such impact." The issue before the court was, therefore, whether BLM had unreasonably concluded that the leases would have no "significant environmental impact." In reviewing BLM's conclusion, the court acknowledged "BLM's factual analysis in its area of expertise should be approached with substantial deference." On the other hand, the court noted it "must nevertheless evaluate whether these factual determinations, and the underlying logic, were premised on reasonable assumptions."

Based on lease sales in the last twenty years, BLM's conclusion had assumed that only one well would be drilled across the four parcels to be leased. Accordingly, BLM argued that its conclusion was reasonable because it was "borne out of past data." The court, however, noted that this past data was at a time when oil prices were significantly lower. As a result, the federal district court found BLM's projection failed "to take into account all 'reasonably foreseeable' possibilities as required by NEPA":

BLM plainly limits its analysis to one scenario - a lessee drills an exploratory well, no oil is found, and the lessee halts all further exploration. While this may

have been reasonable in the past, the record before the agency teaches that it was not reasonable by the time [the leases were issued.] Even BLM itself has acknowledged that fracking activity in the United States has increased dramatically in recent years.

Accordingly, in the opinion of the court, BLM "chose simply to ignore" what environmental impacts "might result from fracking on the leased lands." In so doing, the court found BLM was unreasonable in "categorically refusing to consider an effect that bears 'reasonably close causal relationship' to the action at issue." Further, the court found "it was not reasonable for BLM to consider only a single exploratory well scenario solely based on past data." As a result, the federal district court held this "cursory and inconsistent treatment" was "arbitrary and capricious" in violation of the APA and NEPA.

Moreover, according to the court, "the evidence before BLM showed that the scale of fracking in shale-area drilling today involves risks and concerns that were not addressed by the earlier general analysis of oil and drilling development in the area." In particular, the earlier EIS for the larger region did not "address these concerns that are specific to these new and significant environmental impacts." As a result, the court found "further environmental analysis was necessary."

## HIGHLY CONTROVERSIAL

Since "the exact scope and extent of drilling that will involve fracking is unknown," BLM had argued that a NEPA analysis "should be conducted when there is a site-specific proposal." The federal district court rejected this argument. In the opinion of the court, "[t[his unreasonable lack of consideration of how fracking could impact development of the disputed parcels went on to unreasonably distort BLM's assessment of at least three of the 'intensity' factors in its FONSI." In particular, the court found that "BLM erroneously held that the leases were not highly controversial."

There was clearly a controversy here regarding the nature of the drilling to occur on the leases and the potential impacts drilling would impose on the nearby communities. Monterey County objected strenuously to the lease sale, citing its water agency's opinion that fracking would put municipal water supplies at risk. Many environmental groups and concerned citizens residing in nearby communities also protested the lease sale on the basis of fracking's potential threats to public health and safety...

A proposal is highly controversial when "substantial questions are raised as to whether a project... may cause significant degradation" of a resource. A substantial dispute may concern the "size, nature, or effect" of the action. If evidence is raised prior to the preparation of the FONSI that "casts serious doubt upon the reasonableness of an agency's conclusions," then the burden shifts to the agency to demonstrate why those responses "do not create a public controversy."

As noted by the court "mere opposition to the project does not in itself create a controversy."

However, in this particular instance, the court found "the volume of comments from and the serious concerns raised by federal and state agencies specifically charged with protecting the environment may support a finding that an EIS" was necessary.

## WATER POLLUTION RISK

In this particular instance, the court found "BLM erroneously analyzed the potential effect of the leases on public health and safety." Specifically, the court found the risk of water pollution to be the "most compelling" claim that fracking on the leased lands posed risk to public health and safety.

Certain parcels included in the lease sale are located in close proximity to San Antonio Reservoir, an important water resource for the Salinas Valley. The lease areas are also a part of the Salinas River watershed, which "play[s] an important role in recharging fresh aquifers." These freshwater sources supply water for nearby communities and agriculture... Fracking liquid contains chemicals that are known to be possible carcinogens, possible human health risks, or hazardous air pollutants. These risks, combined with the parcels' proximity to certain important water resources, should have been properly considered.

In the opinion of the federal district court, BLM had "erroneously discounted the uncertainty from fracking that may be resolved by further data collection." According to the court, "the government's inability to fully ascertain the precise extent of the effects of the activity is not...a justification for failing to estimate what those effects might be before irrevocably committing to the activity." On the contrary, the court found preparation of an EIS is "mandated where uncertainty may be resolved by further collection of data, or where collection of such data may prevent speculation on potential effects."

### CONCLUSION

As a result, the federal district court held the BLM had "violated NEPA in its environment assessment of the leases by unreasonably relying on an earlier single-well development scenario."

That scenario did not adequately consider the development impact of hydraulic fracturing techniques popularly known as "fracking" when used in combination with technologies such as horizontal drilling. Not only was the environment assessment erroneous as a matter of law, the BLM's finding of no significant impact based on the assessment and resulting decision not to prepare an environmental impact statement also was erroneous as a matter of law.

The federal district court, therefore, granted Plaintiffs' motion for summary judgment as to the NEPA claims. According to the court, "[p]ossible avenues of relief include enjoining further surface-disturbing activity pending EIS analysis, or invalidating the improperly-granted leases." Instead, for the time being, the court ordered "the parties to meet and confer and submit an appropriate judgment" within two weeks for the court's consideration.

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