



June 6, 2007

Patricia Gradek, Acting Manager
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U.S. Bureau of Land Management
3801 Pegasus Dr.
Bakersfield, CA 93308-6837

Re: Comments on Environmental Assessment for Two APDs Near Sespe Condor Sanctuary and Hopper Mountain National Wildlife Refuge

Dear Ms. Gradek:

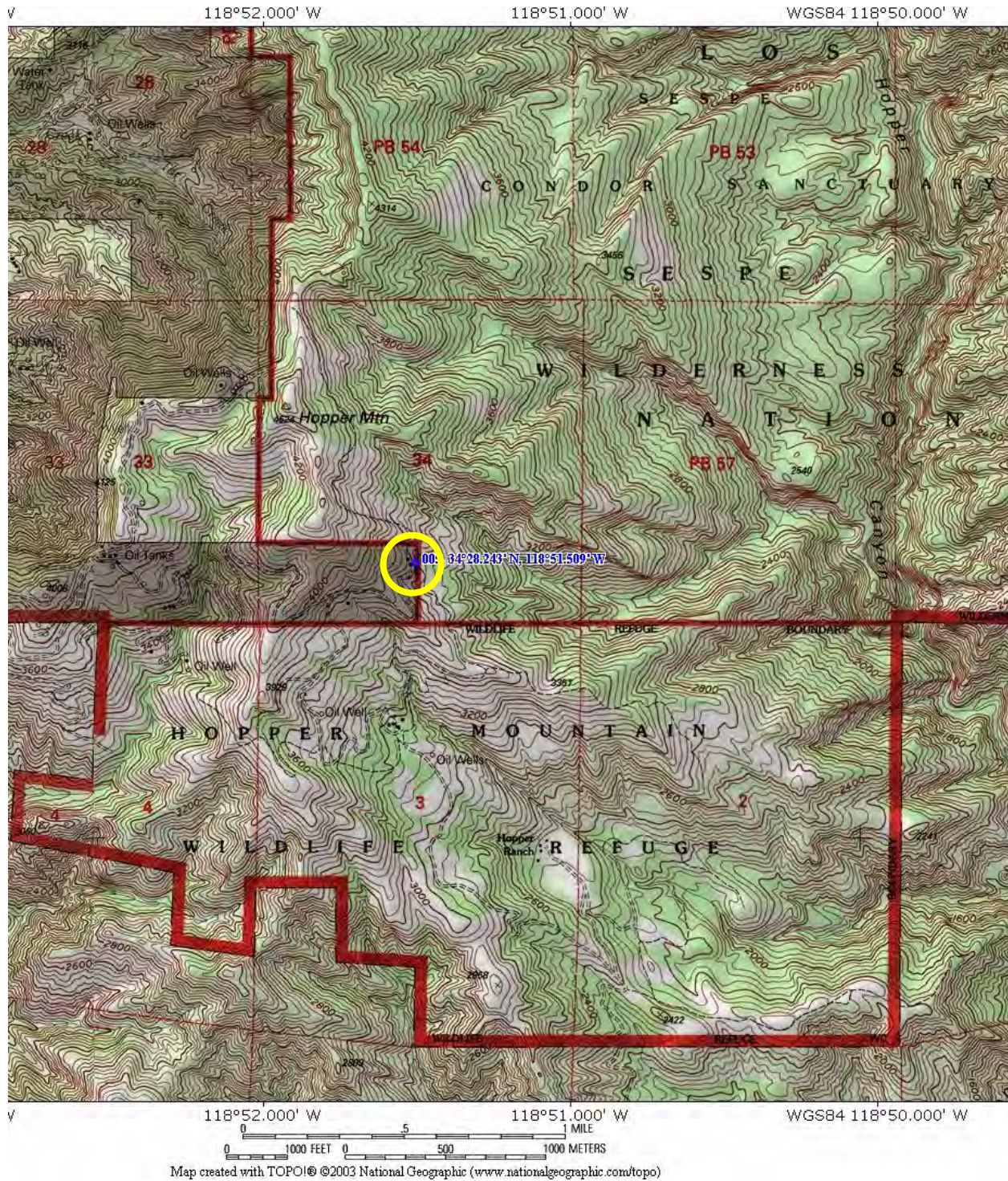
Thank you for this opportunity to comment on the Environmental Assessment (“EA”) for two applications for permit to drill (“APD”) on Hopper Mountain within the boundary of the Los Padres National Forest in Ventura County. Los Padres ForestWatch is a nonprofit, community-based organization working to protect the Los Padres National Forest and the rare wildlife that inhabit it, including the endangered California condor, from damage caused by oil development. The Center for Biological Diversity is a national nonprofit conservation organization with more than 35,000 members dedicated to the protection of endangered species and wild places.

As you know, the subject of these APDs and EA is a proposal by Seneca Resources to drill two new wells on an existing well pad on Hopper Mountain. The pad is located on a narrow sliver of private land within the boundary of the Los Padres National Forest, between the Hopper Mountain National Wildlife Refuge and the Sespe Condor Sanctuary. The well pad currently holds at least 13 oil wells, none of which have ever undergone environmental review under the National Environmental Policy Act (“NEPA”). This pad and the proposed wells are located along the edge of the Sespe Condor Sanctuary and less than a quarter-mile from the Hopper Mountain National Wildlife Refuge (see Figure 1, attached).

Because of the ecologically sensitive location of this well pad, it’s critically important to conduct a legally and scientifically proper environmental review of the proposed and existing wells prior to approving any additional oil development at this site. However, the EA and supporting documentation prepared by the U.S. Bureau of Land Management (“BLM”) do not adequately analyze the impacts of the proposed wells on the endangered California condor, on water quality and quantity, or on air quality. We urge the BLM to revise the environmental document and implement additional safeguards to protect the critically imperiled California condor and other natural resources in and around the Sespe Condor Sanctuary and the Hopper Mountain National Wildlife Refuge. Our specific comments and concerns regarding the proposed wells are as follows.

Protecting Our Public Lands Along California's Central Coast

Figure 1: Map of Proposed Well Site in Relation to the Sespe Condor Sanctuary and the Hopper Mountain National Wildlife Refuge



1. The BLM Must Prepare a Full Environmental Impact Statement Because the Proposed Wells May Significantly Affect the Endangered California Condor

The proposed well site is surrounded by the edge of the Sespe Condor Sanctuary on two sides, and by the Hopper Mountain National Wildlife Refuge on a third side. Specifically, the site is located on, or immediately adjacent to, the boundary of the Sespe Condor Sanctuary, and is within less than a quarter-mile of the boundary of the Hopper Mountain National Wildlife Refuge. The sanctuary is designated by the federal government as critical habitat for the endangered California condor. Both the sanctuary and the refuge serve as critical components of the California Condor Recovery Program, and are closed to public entry.

Approximately 26 condors inhabit the general area around the project site, representing 38% of the entire wild condor population in California. CDFG Status Report, April 30, 2007 (attached). The EA acknowledges, in general terms, the importance of this area to the survival and recovery of the California condor:

The general area provides important habitat to the California condor. The proposed project site is within suitable foraging habitat for California condors and condors are likely to forage in the vicinity of the project site. Four condors were observed flying immediately west of the well pad during a site inspection on 12 October 2006. An active California condor nest is located several canyons southwest of the proposed well location, approximately two miles away.

a. The Finding of No Significant Impact Cannot Rely Solely on FWS Concurrence

Because the proposed wells are located in habitat for the endangered California condor, the BLM must comply with the federal Endangered Species Act, 16 U.S.C. §§ 1531 *et seq.* The ESA requires all federal agencies, including the BLM, to consult with the U.S. Fish and Wildlife Service (“FWS”) to “insure that any action authorized...by such agency...is not likely to jeopardize the continued existence of any endangered species,” including the California condor. 16 U.S.C. § 1536(a)(2). In fulfilling this requirement, the BLM “shall use the best scientific and commercial data available.” *Id.*

As part of this required consultation procedure, the BLM issued a “not likely to adversely affect” determination, and requested written concurrence from the FWS on November 7, 2006. The FWS concurred in a letter dated December 20, 2006, stating that “the new wells are not likely to adversely affect the present population of primarily adult condors. *It must be stated however that these conditions can change with the addition of naïve immature condors to the population in the area, of which there will soon be two,*” (emphasis added). After FWS issued this opinion, one of the two condor chicks died and the other was taken into captivity, according to FWS. After the 2007 breeding season, there are now *four* new condor chicks in the vicinity of the proposed wells, according to FWS.

The BLM’s Finding of No Significant Impact (“FONSI”) relies solely on this concurrence to conclude that the proposed wells will not significantly affect the California condor. However, the standard for consultation under the ESA is different than the standard used to determine whether a full EIS is required (“substantial questions whether a project may

have a significant effect,” *LaFlamme v. Federal Energy Regulatory Comm’n*, 852 F.2d 389, 397 (9th Cir. 1988). The BLM cannot avoid preparation of an EIS solely on the written concurrence from FWS. See *Friends of Payette v. Horseshoe Bend Hydroelectric Co.*, 988 F.2d 989 at 994-95 (9th Cir. 1993) (finding that FWS’s approval of a proposed action is one factor in determining whether the proposed action will have an impact on endangered species). In other words, a “not likely to adversely affect” concurrence by FWS is not equivalent to a finding of no significant impact under NEPA.

Moreover, the fact that there are now twice as many young condors in the area means that there is a higher likelihood of risk to the condor. In fact, the FWS letter indicates that the “not likely to adversely affect” determination “can change” with the addition of young condors to the area. This statement alone requires preparation of a full EIS because it indicates that the project *may* have a significant effect on condors under certain conditions. Those conditions – the presence of young condors in the area – are not only present, but have doubled in intensity with the presence of twice as many young condors in the area as last year.

b. The Proposed Wells May Have a Significant Effect on Condors

The brief analysis of condor impacts in the EA presents substantial questions as to whether the proposed wells will have a significant effect. The EA states that condors have frequented oil fields, but that this behavior has not been observed in the last two years, “presumably due to the more mature age of the free-flying condor population.” This statement assumes that condors in the area will always be of mature age, and that no new condor chicks or young will be introduced to the area – an incorrect assumption in light of recent news that there are now four new condor chicks in the vicinity. The presence of four young condors in the area suggests that there will be a continuing threat of habituation over the next several years as these birds mature, and as additional young are hatched. Moreover, the two years cited in the EA is not sufficient time to conclude that adult condors in the area are no longer habituated to human activity at oil fields.

The EA also concludes that the hazard of oil spills and leaks has been reduced, citing the existing practice of “closely monitor[ing] all facilities for oil leaks” and “promptly clean[ing] and dispos[ing] of any discovered pools of oil.” However, as recent events like the January 2007 oil spill have shown, some oil spill cleanups may take more than a month to complete. The recent spill released more than 800 gallons of oil and an unknown amount of wastewater into Tar Creek, coating more than three miles of that stream along the edge of the Sespe Condor Sanctuary. While the recent spill apparently did not affect any condors, other recent spills have. According to the U.S. Forest Service, an adult condor recently became coated with oil “due to a small spill of oil that occurred when the condor was present and flew down to the spill before workers could remove the oil.” Our review of official spill reports indicates that there have been nearly a dozen oil spills in this area in the last three years alone.

The EA also states that “BLM is not aware of any impacts to California condors from Seneca Resources operations on public lands in the past few years.” The document should disclose whether other agencies are aware of such impacts; whether the BLM is aware of condor impacts from *non-Seneca* operations; whether the BLM is aware of condor impacts that have occurred on *private* lands; and whether the BLM is aware of condor impacts that occurred *beyond* “the past few years.”

There are several documented cases of California condors being harmed by oil drilling activities. In April 2002, the FWS had to flush condor number 100 from an oil pad, and later recorded oil on its face and wings. The U.S. Fish and Wildlife Service determined that the condor became oiled while trying to tear an oily rag from a pipe. Photographs and reports demonstrate habituation of condors to oil drilling equipment. The U.S. Forest Service also noted in 2005 that a condor became oiled due to “a small spill of oil that occurred when the condor was present and flew down to the spill before the workers could remove the oil.” Other condors have been found with oil on their heads as well, according to FWS. All of these incidents occurred *after* implementation of the 1991 Memorandum of Understanding between FWS, USFS, and the Sespe Operators Group. A collection of these records and photos are attached.

The EA fails to disclose whether there are any nesting sites nearby that are not currently active, but have been active nest sites in the past. The EA discloses that an “*active* California condor nest is located several canyons southwest of the proposed well location, approximately 2 miles away,” but does not disclose what sources the BLM consulted to determine the presence or absence of this and other historic or current condor nesting and roosting sites in the vicinity of the project. These sources should include, but not be limited to, the California Natural Diversity Database, the U.S. Forest Service, and the FWS California Condor Recovery Program. A discussion of historic and suitable future nesting sites is appropriate, since condors do not nest in the same site year after year, and will nevertheless require additional nesting sites as more condors are hatched or released into the wild. Moreover, the EA also does not discuss whether other drilling-related activities, such as trucking water and equipment, would occur in close proximity to these sensitive condor areas; rather, it only focuses on the actual drilling site.

The EA fails to adequately describe the general impacts to condors caused by oil drilling and related activities, and how the proposed action in particular may contribute to some or all of these impacts. The FWS describes these impacts as follows:

Nest, roost, or perch sites and/or foraging habitat used by California condors could be affected by road, pipeline, well pad construction, or other hydrocarbon extraction related activities. Project-related noise, such as from detonations, gas compressors, diesel-powered electric generators, or low-flying helicopters, could cause adult birds to repeatedly flush from, or eventually abandon, an active nest, or prevent them from choosing otherwise suitable habitat as a nest site. General human activity associated with oil and gas extraction could discourage condor use of habitat that may otherwise be suitable for nesting, perching, roosting, or foraging.

Garbage and debris could be left out by oil and gas workers while conducting project activities. This could include small items such as bottle caps, nails, screws, nuts, washers, rags, electrical components, and wire. Condors have been known to ingest items such as these. Several of the recent California condor chicks raised in the wild have recently suffered or died from ingesting debris such as this. Long sections of loosely coiled wire can entangle curious condors that might investigate work sites (this happened within the last few years at a communication site on the Los Padres N.F.). Toxic fluids could also be left out in the open accessible to condors (this resulted in the death of a California condor in

the past when it drank antifreeze that was left out). If crude oil were to leak from a well or ruptured pipeline and form a pool, a California condor could land in it and become oiled or entrapped (e.g., in 2002, California condor number 100 visited a well pad and got his head covered in oil and others have been found with oil on their heads as well.)

Aircraft used to access remote locations where oil and gas exploration might occur could collide with flying condors. California condors might also collide with exposed power lines erected to deliver power to well pads to run pumps, compressors, and generators. Power lines that span canyons or are located along ridge lines would be the most dangerous for flying condors. Collisions with power lines has been one of the leading causes of recent California condor mortality, especially for young birds. Six immature condors have been recovered below power lines on or near the Hopper Mountain National Wildlife Refuge....

Condors that perch on human made structures and become habituated to human activity lose their fear of humans and are less likely to avoid human actions that could result in their injury or death.

U.S. Dep't of Interior, USFWS. *Biological Opinion on the Proposal to Lease Oil and Gas Resources within the Boundaries of the Los Padres National Forest, California*. February 23, 2005 (citations omitted).

The drilling process in particular requires a high level of human activity, yet the EA fails to address the potential of condors in the vicinity to become habituated to human activity, despite the fact the drilling an oil well is likely the most disruptive and intensive phase of the oil development process, according to the EA:

The greatest amount of human, vehicular, and equipment activity and accompanying noise, etc. occurs during the construction and drilling activities. A significant amount of traffic is generated by trucks hauling equipment and water, service companies delivering supplies and equipment and performing specialized work on the well, drilling crew shift changes, well treatment, and testing equipment, etc. There is a high level of human activity and use of heavy construction and drilling equipment during operations, which is accompanied by considerable noise and highly visible activity.

The EA fails to analyze impacts to the condor that may result from this high level of activity. Also, the EA is silent on the impacts of oil drilling on condor foraging, which is particularly troublesome since the proposed well site is surrounded by habitat used for foraging.

c. The BLM Must Prepare a Full EIS Because of Potentially Significant Cumulative Effects to the Condor

Even if the proposed two wells, taken alone, would not significantly affect the endangered California condor, the cumulative impacts of the proposed wells, combined with the impacts of the existing wells on the same pad and other existing and proposed oil development

activity in the area, may significantly affect the California condor. Potentially significant cumulative impacts may arise from:

- The 13-15 existing wells on the proposed well site;
- Other wells and associated infrastructure in the vicinity of the proposed well site, including but not limited to three other pads located within one-half mile of the proposed well site (see Figure 2);
- Other wells and associated infrastructure in condor habitat;
- Proposed wells on private and public land; and
- Other non-oil development activities in condor habitat.

These cumulative impacts necessitate preparation of a full EIS. This is particularly important, since apparently none of the existing wells on this pad have undergone NEPA review. According to the BLM, the first well on this pad dates back to 1978, and there is no record of NEPA compliance. The other existing wells on this pad were drilled between 1978 and 1990, according to BLM, and the agency has no documentation of NEPA compliance on any of these existing wells, either. Nor was any environmental review conducted on the issuance of the lease, as it was issued in 1965 and pre-dates NEPA.

Figure 2: Other Well Pads (#1-3) Within 0.5 Miles of Proposed Well Site (#4)



d. The BLM Must Prepare a Full EIS Because of the Context and Intensity of the Potential Effects on the California Condor

The FONSI states that “no anticipated effects have been identified that are significantly controversial.” The evidence presented in this letter, along with the attached documentation, which includes a letter from a condor biologist who is very familiar with the drilling site, indicates that the effects of this project *are* significantly controversial. A federal action is controversial if “a substantial dispute exists as to [its] size, nature, or effect.” *Foundation for North American Wild Sheep v. United States Dep’t of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982) (requiring an EIS because of “numerous responses from conservationists, biologists, and other knowledgeable individuals, all highly critical of the EA and all disputing the EA’s conclusion”). The letter from Dr. Allan Mee, outlining several concerns with the proposed drilling site and its proximity to condor habitat, is attached.

The FONSI also states that “no significant cumulative impacts have been identified.” This letter and attached documentation identifies several potentially significant cumulative impacts.

Finally, the FONSI cites solely to the informal consultation with USFWS. As explained above, a determination under the ESA is not the equivalent of a finding of no significant impact under NEPA.

2. The EA Fails to Disclose Impacts on Groundwater and Surface Water Quality and Supply

The EA states that “approximately 10,000 barrels of water may be required to drill and complete an oil or gas well to the depth of 8,000 feet,” citing to the Forest Service Los Padres Oil and Gas EIS. However, our review of this EIS indicates a significantly higher number. Specifically, the Final EIS for Oil and Gas Leasing, Los Padres National Forest states on page 12 of Appendix C that “[a]lthough it will vary significantly from well to well, approximately 40,000 barrels or up to 1,700,000 gallons of water may be required to drill an oil or gas well to the depth of 9,000 feet.... More water is required if the underground rocks are fractured and drilling fluids are lost into the formation.” The EA fails to explain the 400% discrepancy between the water usage figures cited in the EA, and the figures presented in the referenced EIS. We also note that water usage for the two proposed wells may be higher than 40,000 barrels, as the proposed wells will be slant drilled at an angle, meaning the drill will need to extend longer than 8,000 feet in order to reach a depth of 8,000 feet. The environmental document should also disclose how much additional water would be used in the event that underground rocks are fractured and drilling fluids are lost in the formation.

Notwithstanding the amount of water used, the EA also fails to disclose the source of the water to be used. Will it be trucked or piped to the site, and if so, from where do the trucks or pipes receive the water? Will groundwater or surface water be used? Where is the location of the water well or pump, and what is the safe yield of this aquifer?

If water will be trucked to the site, then the EA should disclose this and analyze the impacts of a significant number of trucks driving to and leaving the project site. Drilling an oil

well is a water-intensive process, and the EA states that if the water is hauled by truck to the drilling site, “a significant amount of traffic will be generated by transporting water to and from the drill site.”

The “Affected Environment” section states that the closest perennial drainage is Tar Creek, approximately two miles from the well pad. This section should also evaluate the setting of Hopper Canyon Creek, since the well pads are actually located in that watershed, not in the Tar Creek watershed. This section should also evaluate any other drainages affected by project activities, including drainages that trucks must cross to access the site.

The “Environmental Consequences” section relating to water impacts is equally as deficient. It merely repeats the statement that Tar Creek is the nearest perennial drainage, and includes a conclusory statement that groundwater tables will not be affected by this project. This section must evaluate the impacts of water usage caused by drilling the two proposed wells, as well as the cumulative impacts of water usage, injection, and disposal on water quality and quantity during all phases of drilling, production, and abandonment from these and other wells in the area that are drawing water from, or disposing wastewater into, the same source. A partial list of water usage and disposal during the life of an oil well includes:

- Well Stimulation – using explosives, hydrochloric acid, or hydraulic fracturing to enlarge channels or to create new ones in the producing formation of rock to enhance oil production.
- Disposal of Produced Water – fluids produced from a well normally contain oil, gas, and water. The emulsion is treated to separate the water from the oil, and the water is disposed of by subsurface injection, waste pits, or other methods.
- Waterflooding – the most commonly employed form of secondary recovery, whereby water is injected into the reservoir under pressure to drive additional oil to the producing wells.

3. The EA Fails to Adequately Analyze Impacts on Air Quality

The EA contains a one-paragraph analysis of air pollutants emitted from this project, and concludes – without any supporting evidence – that the project “may slightly increase amounts of dust and mechanical emissions but no significant cumulative impacts to air quality would be expected as a result of the implementation of the proposed action.”

The environmental document must *quantify* the estimated direct, indirect, and cumulative air pollutant emissions generated by this project. The EA also fails to disclose that the project site is located in an air basin classified as non-attainment for air quality.

4. Seneca Resources and Ventura County Must Prepare an Initial Study Under the California Environmental Quality Act

While the proposed well site is surrounded on three sides by federal land, the well site itself is located on private land, and thus requires a Conditional Use Permit and Zoning

Clearance from the County of Ventura. This discretionary permit triggers the requirements of the California Environmental Quality Act (“CEQA”), which mandates the preparation of an Initial Study, a Mitigated Negative Declaration, and/or a full Environmental Impact Report before drilling can commence.

While the BLM may not be responsible for preparing this CEQA documentation, we simply want at this stage to emphasize this requirement.

5. The EA Must Discuss Why the Proposed Wells Comply With the Forest Plan & Resource Management Plan

The EA and FONSI conclude that the proposed wells are consistent with the Los Padres National Forest Land Management Plan, without any supporting explanation or analysis of the relevant provisions of this plan. The EA must explain *how* and *why* the proposed action is consistent with this management plan, not just state in conclusory fashion that it is consistent.

The EA also cites the Caliente Resource Management Plan, but does not state whether the plan is consistent with that document (and if so, how and why it is consistent), nor does the FONSI cite to the Caliente Resource Management Plan.

6. The EA Fails to Analyze a Reasonable Range of Alternatives

The NEPA requires that an environmental document must discuss alternatives to the proposed action in order to “provid[e] a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14; 42 U.S.C. § 4332(2)(E). The Council on Environmental Quality, which wrote the NEPA regulations, describes the alternatives requirement as the “heart” of the environmental document. 40 C.F.R. § 1502.14. The purpose of this requirement is “to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means.” *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1135 (5th Cir. 1974); *Methow Valley Citizens Council v. Regional Forester*, 833 F.2d 810 (9th Cir. 1987), rev’d on other grds, 490 U.S. 332 (1989) (agency must consider alternative sites for a project). The requirement for analysis of a reasonable range of alternatives applies to EAs as well as EISes. *Akiak Native Community v. U.S. Postal Serv.*, 213 F.3d 1140, 1148 (9th Cir. 2000).

The EA violates these clear requirements by only analyzing the effects of two alternatives – the “proposed action” and the “no action” alternatives. The environmental document must examine a reasonable range of alternatives, such as locating the wells on another existing pad that may be further away from condor nesting and foraging areas and other ecologically sensitive areas in the Sespe Condor Sanctuary and Hopper Mountain National Wildlife Refuge.

7. The Proposed Decision Record is Inadequate

The proposed Decision Record (“ROD”), attached to the EA, does not describe the project or contain a listing of any of the project elements or mitigation measures outlined in the EA. Instead, the ROD merely states that “It is therefore my decision to approve the proposed action, subject to the mitigation measures identified for the proposed action in the Environmental Assessment.” However, the EA under Section V – Mitigation does not contain any mitigation measures. Rather, the EA states that all of the measures to prevent impacts have been “built into the proposed action.” The proposed action should be detailed in the ROD to ensure that all protective measures and mitigation measures are implemented and that there is a clear, enforceable mechanism for doing so. The ROD should describe the proposed action that is the subject of the decision, including a detailed listing of all of the protective measures that are “built into the proposed action.” That way, it’s clear what the decision is and what the protective measures are.

The ROD should also specify the monitoring requirements undertaken by BLM or Seneca, detailing what type of monitoring is to occur, the frequency of such monitoring, reporting requirements, and how adjustments will be made to the proposed action based on the results of such monitoring.

Thank you for your consideration of our comments. Please provide us with a copy of any revised or finalized environmental documents, decision documents, or other public notices associated with this proposal.

Sincerely,



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June 5, 2007

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**Re: Comments on Environmental Assessment for two APDs near Sespe Condor
Sanctuary and Hopper Mountain National Wildlife Refuge**

Dear Ms. Gradek,

Thank you for the opportunity to comment on the Environmental Assessment (EA) for two applications for permit to drill (APD) on Hopper Mountain, Ventura County.

From late 2001 until late 2006 I held a postdoctorate fellowship with the Zoological Society of San Diego with the objective of undertaking intensive studies of reintroduced populations of the endangered California Condor *Gymnogyps californianus*. My focus over the five-year study was the breeding ecology and population dynamics of the southern California condor population, with fieldwork primarily centered on Hopper Mountain National Wildlife Refuge and the Sespe Condor Sanctuary. A major output of the study was the editing and publication of the first scientific monograph on the condor (California Condors in the 21st Century, A. Mee & L. S. Hall Eds. NOC Series in Ornithology No. 2) since Karl Koford's work published in 1953. Further, a number of peer-reviewed scientific articles on condor biology and conservation challenges have either been published (eg., Mee et al. 2007. Junk ingestion and nestling mortality in a reintroduced population of California Condors *Gymnogyps californianus*. *Bird Conserv. Int.* 17:1-13), in press or in preparation. Therefore, I believe I am qualified to comment critically on the EA for the proposed development, the effects of oil drilling in the

Hopper Mountain area on condors to date, and potential effects of the proposed development on the condor population in southern California.

The APDs and EA concern a proposal by Seneca Resources to drill two new wells on an existing oil-pad located near the boundaries of Hopper Mt NWR and the Sespe Condor Sanctuary and within the Los Padres National Forest. Having studied the EA and supporting documentation at very short notice, I find the document wholly inadequate in addressing past, present and future effects of drilling on the condor population. I do not address issues concerning impacts on water or air quality here as these are not my field of expertise. My comments on the EA and the impact of the proposed development on condors are as follows:

EA IV. Environmental consequences of the proposed action

Potential effects to the California Condor

This section makes no mention of an active nest **0.7 miles** (condor pair #125 & #111) **west of the proposed development** (coordinates/UTMs can be supplied to verify this; distances measured by GPS). This nest produced a chick in 2004 but this chick subsequently died at 4 months of age prior to fledging. The site was located on the cliff immediately west of the oil-pads on what is known to biologists as Koford's Ridge. In 2005, the same condor pair nested a little further west on the same cliff about 0.8 miles from Powell Wells 3 & 4. This pair was subsequently trapped and held at the San Diego Wild Animal Park for over a year (to initiate experiment conditioning of the pair to test if they could be weaned off their predilection for trash ingestion and allow them to successfully rear a chick to fledging after 3 failed attempts in the wild) before being re-released along with their chick from 2006 at Hopper Mountain NWR in early 2007. This pair is now breeding in the same general area as previous nesting attempts. Although this pair did not have an active nest in 2006 (in captivity), the pair is likely to nest close to the proposed development, certainly significantly closer than the successful nest in 2006 quoted as 2 miles from the Seneca development (1.8 miles according to my calculations).

At this point I would like to draw your attention to the following. In 2004, during the nesting attempt by pair #125 & #111, intensive drilling operations were in progress on the same oil-pads (Powell 3 & 4). Observers at this time noted the extreme noise coming from the pad throughout the day for several weeks. The following extract was posted at the time on the California Condor listserv as an update on breeding effort at the time:

Southern California Breeding Update: May 2004

Three pairs continued to attend and feed chicks during May and to date all appears well with levels of parental attendance and care at two nests. **One pair (#125 & #111) has been noticeably less attentive, spending little time at or near the nest apart from visits to feed the chick. Hopper and Ventana birds continue to frequent oil-pads** as well as regularly visiting Kagel Mountain (San Gabriel Mts), landing on buildings and at roadside turnoffs. Of the breeders only the two young females #192 and #161 have made regular trips to Kagel. Efforts continue to be made by USFWS field-crews and volunteers to haze birds at this site.

So Cal 4 (male #125 & female #111): This pair continued to feed their chick throughout the month but roosted away from the nest some weeks before the other pairs. More recently, the parents have largely been visiting the nest for only a few minutes at a time during which it is assumed they feed the chick. This level of nest attendance contrasts with that of the other two pairs and the previous behavior of the same pair in 2003. Whether coincidence or not, **high levels of noise and activity at a nearby oil-pad have been ongoing since the middle of the month. Observations by Jan Hamber on one date suggested that the parents might have been reacting to noise on this pad by leaving the nest area.**

My own observations also suggest that this pair was behaving abnormally in abandoning brood care for their less than one month old chick much earlier than seen in other pairs before or since.

The EA states that “*the existing pad is located 2 miles northeast of the active condor nest, meeting the ½ mile restriction*”. This may have been the case in 2006 but is certainly not likely to be the case in 2007 or future years as long as pair #125 & #111 are breeding in the wild. It is reiterated in the following page that wells at the proposed site were in operation during nest-site selection and during breeding and had no apparent effect on the breeding pair. This is not surprising in this case as the wells are located in a different watershed and out of view. It is also stated that “*the condor chick successfully fledged in late October 2006.*” However, it is not stated (and may have not been made known to those carrying out the EA) that this chick was removed from the nest some months earlier to carry out invasive surgery at Los Angeles Zoo to remove a large amount of trash and other debris. The chick was placed back in the nest next day and survived this ordeal. However, it is beyond question that this chick would have died without human intervention. My point here is that the successful fledging should not be used as an endorsement of a lack of effect of oil development given the chick’s history.

Further, the point that “*a more mature condor population is expected to provide an appropriate behavior example for the young condor, which include avoidance of oil field areas*” is baseless. The southern California population will always be composed of a sizeable proportion of young condors while the population in expanding and birds are released into the wild from captive breeding facilities. Moreover, there is little or no evidence to suggest that adults are “avoiding” oil pads. Condors in southern California have tended to show a seasonal pattern of use of oil pads and the ingestion of trash continues to be the most serious nestling mortality factor. During my intensive observations of the population, especially in 2002, 2003, 2004 & 2005, the oil pads in the Hopper Mt area were heavily used in late winter and spring with, on occasion, the whole population landing on oil pads. Oil pad use by many condors was constant during this period and required much intervention by USFWS staff to keep condor from spending periods of time at pads. Undoubtedly, condors have and continue to land at pads, especially early in the morning, when FWS staff are not present.

Condor roosts: no mention is made or consideration given to disturbance to condors at roost sites. During my period of study one of the most heavily used roost sites for condors in the southern California population was at what are known locally as “Koford’s Snags”. This small grove of bog-cone spruce is located **0.26 miles north of the proposed development** at wells 3 & 4. No assessment has been made of the effects of oil-pad usage on condor presence at this roost and possible relationship to disturbance

Cultural Resources

Wilderness: in this section it is stated that “noise will be isolated to the immediate area surrounding the proposed well site”. What is this assessment based on? During drilling at this same site in 2004/2005, noise from this pad could be clearly heard at one of the condor nest observation points 1.3 miles WSW overlooking Hopper Canyon.

In its own submission (Nov 2006) BLM presents a series of 15 measures required to minimize potential impacts on condors. No. 4: maintain sites free of debris and trash, has been the policy on paper at oil development sites but has never been pursued rigorously in practice. Condors are undoubtedly attracted to human activity and habitually investigate sites where activity takes place for potential food. Keeping such sites entirely free of trash at all times is unrealistic. I speak from experience here having investigated many apparently “clean” oil-pad sites and subsequently filled several bags with trash items. Moreover, I was the observer at a condor nest in 2002 when the male condor arrived at the nest with its head coated in oil presumably having returned from an oil-pad. At the time the key concern was ingestion of oil by the newly hatched chick and this concern remains.

In summary, the current EA is wholly lacking in detail and lacks much critical information that is needed to make a valid assessment. Thus the EA does not constitute a serious attempt at investigating effects on the endangered California Condor.

Yours sincerely

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