



May 11, 2007

VIA EMAIL

Natasha Greaves
EPA Region 10
Office of Air, Waste and Toxics (AWT-107)
1200 Sixth Avenue
Seattle, WA 98101
Email to R10-Public_Comments@epa.gov

Re: Public Notice of Outer Continental Shelf Air Quality Permits, Public Hearing, and Public Comment Period; Shell Offshore, Inc. (“Shell”) Exploratory Drilling in the Beaufort Sea; Preliminary Decision to Approve Air Quality Permits for the Kulluk and Frontier Discoverer.

The Center for Biological Diversity submits the following comments on the Environmental Protection Agency’s (“EPA’s”) proposed issuance of Air Quality Control Minor Permits Nos. R10OCS-AK-07-01 and R10OCS-AK-07-02 for the installation/construction of the Frontier Discoverer and Kulluk Drilling Units by Shell Offshore Inc. (“Shell”) in the Beaufort Sea off Alaska. We are concerned about the impact of the proposed activities on the rare and endangered wildlife, their habitats, the air quality, and on the communities dependant on these species and habitats and air quality. We therefore urge EPA not to issue any permits to Shell for the proposed activities unless and until the agency can ensure that mitigation measures are in place that truly avoid adverse impacts, both direct and cumulative to the air quality, and all other resources, and only after full and adequate public participation has occurred and environmental review of the cumulative impacts of such activities on the air quality of the region has been undertaken. Unfortunately, the proposed authorizations do not meet these standards and therefore violate the Clean Air Act, the National Environmental Policy Act (“NEPA”), and other governing statutes and regulations.

Many of our concerns have been raised by comment letter submitted by the Northern Alaska Environmental Center and other organizations working to protect the Beaufort Sea. We join in those comments and incorporate them by reference. Additionally, we have the following concerns.

No proper analysis for Shell’s proposed activities has been carried out under NEPA. Both the underlying lease sale (202) and the exploration plan were approved by the Minerals Management Service (“MMS”) with Environmental Assessments (“EAs”) in lieu of preparing an Environmental Impact Statement (“EIS”) as required by NEPA. On October 6, 2006 we submitted comments to MMS on the 202 EA pointing out the serious legal deficiencies of that document. A copy of those comments are appended to this letter as Exhibit A and incorporated by reference herein. To the degree that EPA is also relying on the Environmental Assessment prepared by MMS for approval of the Shell exploration plan (“Shell EA”), we believe that

document is also legally flawed. Specifically with regard to air quality, that document contained only three sentences- hardly a legally adequate review. Our critique of the Shell EA is contained in a letter to the Secretary of Interior seeking a stay which is appended to this letter as Exhibit B and incorporated by reference herein.

Similarly, there is no indication of compliance with the Endangered Species Act. At least three listed species, the bowhead whale and the Steller's and spectacled eiders, occur in the action area. EPA must complete section 7 consultation prior to issuing the proposed permits.

In addition to the NEPA and ESA deficiencies, among the other flaws in the proposed permits are the following:

- EPA has allowed Shell to improperly segment a single exploration plan such that the impacts of the separate drill ships are considered separately rather than cumulatively. Similarly, EPA have largely discounted the impacts from the numerous support ships that will be operating in conjunction with the drill ships, even though the ice-breakers contribute 70-80% of vessel fleet air emissions. If looked at in total, it would be clear that Shell's proposed operations constitute a major rather than a minor source and could not be approved under the current procedure.
- EPA is proposing to give Shell an overly broad authorization to operate on all Shell lease blocks, rather than to specific drilling sites, notwithstanding the differences in air quality and other resources between these sites.
- The EPA permits indicates that Shell will drill up to three wells per drill ship per year, contrasted with MMS EA which discussed two exploratory wells drilled per rig year.
- The EPA permits indicate that Shells' program may run through 2011. No environmental review has been prepared past 2007. The permits themselves are apparently for indefinite duration.

For all of the above reasons, we believe Shell's request for air permits for drilling activities in the Beaufort Sea must be denied. We look forward to EPA's prompt response to these comments. Also, please provide us via email (bcummings@biologicaldiversity.org) and U.S. mail with final permit documents as soon as they are available. Thank you for your consideration of these comments.

Sincerely,



Brendan Cummings
Center for Biological Diversity
P.O. Box 549
Joshua Tree, CA 92252

Exhibit A

October 6, 2006

Alaska OCS Region, Minerals Management Service
Attention: Sale 202 Coordinator
3801 Centerpoint Drive, #500
Anchorage, AK 99503-5823

Via Electronic Comments and First-Class Mail

RE: Comments on the Environmental Assessment for the Proposed Oil and Gas Lease Sale 202, Beaufort Sea Planning Area (MMS 2006-001)

Dear Ms. Cranswick:

Thank you for this opportunity to comment on the Environmental Assessment for the Proposed Beaufort Sea Planning Area Oil and Gas Lease Sale 202 (EA). These comments are submitted on behalf of Alaska Center for the Environment, Alaska Coalition, Alaska Wilderness League, Audubon Alaska, Center for Biological Diversity, Gwich'in Steering Committee, Natural Resources Defense Council, Pacific Environment, Sierra Club, The Wilderness Society, and Trustees for Alaska and their members in Alaska and nationwide.

We are seriously concerned about the risks posed to sensitive marine and coastal environments from the proposed oil and gas activities in the Beaufort Sea. This vast proposed sale area reaches across America's Arctic from the Canadian border almost to Barrow. We are particularly concerned about oil exploration and development impacts that threaten the entire coastline of the Arctic National Wildlife Refuge and the calving and post-calving habitats of the Porcupine Caribou Herd, the Teshekpuk Lake Special Area, Smith Bay, Dease Inlet, Elson Lagoon, and other sensitive habitats of the National Petroleum Reserve-Alaska (Reserve), and sensitive marine habitats throughout the Beaufort Sea including the spring lead zone and fall migratory and feeding habitat of the bowhead whale.

We wish to express our opposition to proposed Beaufort Sea Outer Continental Shelf (OCS) Lease Sale 202 because it poses unacceptable risks. This proposed lease sale would permanently harm the integrity of the wilderness, wildlife and coastal areas of the Arctic National Wildlife Refuge and internationally significant habitats of the Reserve. Oil spills, noise, on- and off-shore infrastructure and industrial disturbance pose direct, indirect and cumulative impacts to bowhead whales, polar bears, migratory birds, fish, caribou, wildlife habitats, and subsistence users. Offshore exploration and development would cause pollution and higher levels of aircraft and vessel noise and related industrial

activity that would degrade the coastal areas, even if there were no construction of infrastructure within its boundaries.

Furthermore, there would be intense pressure in the future to link onshore airports, pipelines, roads, docks, and other support facilities in adjacent coastal areas to support OCS development.

1. An EIS is Required

MMS is again continuing its plan of offering to lease an enormous area (9.7million acres) and, at the same time, refusing to do any site-specific analysis because of the “limited information . . . about where and what leasing, exploration, and development is likely occur.” Multi-Sale FEIS at VII-31. As pointed out previously, the National Environmental Policy Act (NEPA) requires MMS to prepare a separate EIS for each lease sale in order to compensate, in part, for the enormous scope of the area at stake, the difficulty of preparing an adequately site-specific assessment of impacts for such a large region, and the significant impacts that will occur.

In addition, because significant new environmental issues and information have come to light since the Multi-Sale Final Environmental Impact Statement (Multi-Sale FEIS) for Lease Sales 186, 195 and 202, MMS should complete a full EIS for Lease Sale 202. The threshold for requiring an EIS is “relatively low.” *Oregon Natural Desert Ass’n v. Singleton*, 47 F. Supp. 2d 1182, 1190 (D. Or. 1998). In part this is because of the possibility that an agency may overlook or underestimate a serious environmental impact when relying on the analysis of a much less rigorous and foreshortened Environmental Assessment (“EA”) instead of an EIS. *See City of Davis v. Coleman*, 521 F.2d 661, 673 (9th Cir. 1975).

MMS recognizes that “parts of the Beaufort Sea environment have changed substantially since preparation of the multiple-sale EIS.” EA at 10. For example, more polar bears are staying onshore during the fall. *Id.* There is new information on global climate change that requires consideration in an EIS. For instance, the rate of sea-ice reduction is three times faster than was predicted in the Multi-Sale FEIS, and the landfast ice season is shorter. *Id.* at 10-11. This leads to changes in the acoustic environment, *id.* at 12, a concern that was not discussed at all in the Multi-Sale FEIS. MMS also recognizes that the estimated total area that will be subject to seismic exploration is now twice as much as was estimated in the Multi-Sale FEIS. EA at 18. In addition, the chance of a large oil spill has increased from 8-10% to 21% for Sale 202. EA at 15.

MMS is also proposing to conduct new leasing in the Chukchi. The cumulative effects of development in the Chukchi and Beaufort Seas was not considered in the multi-sale EIS and needs to be analyzed in a full EIS.

MMS correctly recognized the requirements for an EIS when it stated in the Multi-Sale FEIS that if the EA review “results in new issues or sufficient new information not addressed in the multiple-sale EIS, the MMS will prepare a supplemental

EIS.” Multi-Sale FEIS at I-23. Because this significant new information was not addressed in the Multi-Sale FEIS, MMS must prepare a supplemental EIS.

MMS cannot escape a finding of significance here simply by relying on mitigations measures. The “regulations contemplate that agencies should use a broad approach in defining significance and should not rely on the *possibility* of mitigation as an excuse to avoid the EIS requirement.” *Davis v. Mineta*, 302 F.3d 1104, 1125 (10th Cir. 2002) (emphasis in original). Thus, an “agency must explain exactly how the measures will mitigate the project’s impact.” *LaFlamme v. F.E.R.C.*, 852 F.2d 389, 399. (9th Cir. 1988). If there remain substantial questions about the effectiveness of mitigation measures in reducing the significance of impacts, an EIS is required. *Foundation for North Am. Wild Sheep v. United States Dep’t of Agric.*, 681 F.2d 1172, 1181 (9th Cir. 1982).

MMS notes that risk to the polar bear population has increased since preparation of the Multi-Sale FEIS, and suggests that “reducing the concentration of polar bears on shore in the fall would be the most effective way to mitigate potential oil-spill impacts.” EA at 35. However, as MMS recognizes, it cannot rely on this possibility to reach a FONSI. MMS suggests that the new Information to Lessee (ITL) will help to ensure the level of risk does not increase, but MMS does not explain the effectiveness of the measure in reducing the significance of the impacts to polar bears. EA at 35. Indeed, MMS recognizes that it is likely the polar bears will face significant impacts.

In addition, “without conflict avoidance measures in place, potentially significant impacts to the subsistence resources and hunts for bowhead and beluga whales, walrus, bearded seals, and polar bears still would result.” EA at 38. However, no conflict avoidance measures or other mitigation exist for most of the marine mammals. Thus, mitigation will not support a FONSI since the potential for significant impacts exists, and an EIS is required.

MMS should also prepare an EIS because of the high level of controversy regarding the leasing program in the Beaufort Sea. *See* EA at 39 (listing controversial issues).

Finally, MMS must prepare an EIS because the FONSI is unsupported by the EA. Indeed, in the EA MMS recognizes that significant impacts may occur. MMS notes that as a result of the new information, some resources will have potentially significant levels of effects.

MMS attempts to avoid an EIS by stating that the new information does not change the conclusions reached in the Multi-Sale FEIS. *See, e.g.*, EA at 34-36, 49, 52, 66. However, this is not the standard for whether an EIS or an EA is appropriate. Rather, an EIS is required if “substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor . . . or there is a substantial dispute [about] the size, nature, or effect of the major Federal action.” *National Parks & Conservation v. Babbitt*, 241 F.3d 722, 736 (9th Cir. 2001).

Similarly, MMS cannot avoid an EIS simply by characterizing potentially significant harm as “improbable.” *See, e.g.*, EA at 47. It is not clear why MMS concludes that it is improbable that an oil spill would reach birds or other environmental resources, especially in light of the harm caused to birds and other species by the Exxon Valdez and the Selendang Ayu.

Our groups previously commented on the deficiencies with the multi-sale EIS and the EAs for lease sales 186 and 195. Because this EIS is tiered to those documents, we incorporate our previous comments by reference.

2. The Development Scenario is Unreasonable

The development scenario is unreasonable and results in an inadequate analysis of effects on the environment. First, the oil price range used to estimate the amount of available oil is low and therefore the analysis does not cover the potential effects at the “high end.” MMS explains that a long-term average price must be used to estimate the price of oil, but the agency does not explain why historical averages are an appropriate benchmark in light of the fact that oil is a non-renewable resource. EA at 2. In addition, the Department of Interior relied on the EIA estimates to determine oil prices in the recent EISs for the Reserve. MMS does not explain why it rejects this approach.

Also, MMS states that the increased oil prices may allow smaller fields to be developed but concludes that because MMS has not observed a corresponding increase in new exploration wells, new field development plans, or production from newly developed fields, the original estimate of one field developed from lease sale 202 remains “a reasonable and appropriate expectation.” EA at 2. This conclusion is not rational, since it will take years for MMS to see any increase in development that results from increased oil prices in the past couple of years.

Finally, MMS should revise the projected levels and types of activities within the three geographic zones. As MMS admits, the agency’s projections for lease sale 186 were dramatically different than what actually occurred, with a majority of the leases sold in the far zone, rather than the near zone, as expected. EA at 3. The projections for lease sale 195 were also incorrect, as “an unanticipated level of interest from a single major company resulted in a far larger than anticipated number of leases being issued in the second sale.” EA at 3.

Nonetheless, MMS insists that “the estimates for the three zones ultimately will be validated after all three sales are held.” EA at 3. In order for this to be true, most of the leases sold in lease sale 202 will have to be in the near zone. However, MMS states that it still expects that leasing will expand into more remote, deeper water during lease sale 202. EA at 4. It is not clear how MMS can insist that the Multi-Sale FEIS predictions for all three zones combined will remain valid and at the same time insist that lease sale 202 will have fewer near zone sales. Furthermore, while MMS defines three geographic zones, these have no relationship to the alternatives that are proposed (i.e.

MMS could have considered an alternative that only offered leases in the near zone, etc.) or to environmental resources. The assumptions in the Multi-Sale FEIS are significantly different from what actually happened and MMS should complete a new EIS that more accurately analyzes the impacts to the environment, especially the special resources existing near shore in the far zone.

3. MMS Fails to Take a Hard Look at the Impacts on Fish from Seismic Surveying

MMS failed to take a hard look at the impacts on fish from seismic activities. In both the Multi-Sale EIS and the EA for Lease Sale 195, MMS failed completely to analyze the effects of seismic activities on fish. Here, MMS tries to remedy that oversight by relying on its conclusion in the Programmatic Environmental Assessment (PEA) prepared this summer in connection with proposed seismic surveys in the Beaufort and Chukchi seas. Its reliance on that conclusion, however, is misplaced.

In the PEA, MMS conceded that there could be population-level impacts. *See* PEA at 59, 60 (seismic surveys could disrupt feeding activities and disrupt important migratory routes, which “may translate into adverse impacts on spawning activity” and ultimately “translate into multiple cascading adverse impacts to new cohorts”). Although the PEA stated that there would be only “adverse but not significant impacts on fish/fishery resources and EFH” from the proposed seismic survey operations, *id.* at 65 (which MMS incorporates here), that conclusion was refuted by MMS’s own fish expert.

In the administrative record for the PEA, compiled in response to a Freedom of Information Act request, MMS’s fish expert explained:

My review of the changes made by [Jill] Lewandowski are that they chiefly serve to diminish (for readers) the large data of deficiencies and information gaps, the great uncertainties associated with past and present impacts, as well as those of the future. The changes also serve to obfuscate the staleness of the available scientific information. It is my professional determination that there is insufficient information and high uncertainties, and that significant impacts attributable to the Proposed Action interacting with climate change cannot be ruled out for fishes of the Chukchi and/or Beaufort seas in light of the climatic warming going on there for a decade or longer and it’s [*sic*] influence upon fish populations.

E-mail from J. Childs to L. Rotterman, C. Monnett, M. Burwell March 30, 2006. In light of MMS’s own expert’s views on the conclusion, it is inappropriate for MMS to rely on the same conclusion here.

4. The Discussion on Subsistence-harvest Patterns and Sociocultural Impacts is Inadequate

Communities of Alaska's North Slope have long used the marine resources of the Beaufort Sea for both subsistence practices and cultural identity. Although MMS recognizes the importance of the resources to these communities, the agency has failed to adequately address the disproportionate impacts of Lease Sale 202 on these communities nor has it adequately consulted with the tribes as required by the Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and accompanying Presidential memorandum (1994). Although MMS states that "potential overall cumulative impacts on subsistence and sociocultural systems from noise, disturbance, large oil-spills, and global climate change would be significant," EA at 105, the agency nowhere meets its burden to prevent disproportionate negative environmental impacts to the communities of the North Slope.

In addition, MMS uses inconsistent significance criteria that do not reflect the values and cultural realities of subsistence communities, ignores the realities of the synergistic effects of cumulative impacts, including global warming, and ignores their own prediction that there will be at least one offshore spill in the Beaufort Sea.

5. The Oil Spill Discussion is Arbitrary and Not Rational

MMS's analysis is internally contradictory. MMS acknowledges that the cumulative impacts of Beaufort lease sales will most likely result in one offshore spill *See, e.g.*, EA at 97. For many resources, MMS also recognizes the potential for significant impacts in the event of an oil spill. However, the agency then concludes that significant impacts are unlikely. For example, as MMS recognizes, in the Multi-Sale FEIS MMS stated that "attaining a level of significant effect is unlikely" for cumulative impacts to subsistence –harvest patterns from an oil spill. EA at 98. However, the agency arbitrarily concludes that there will be "no new significant cumulative impacts [to subsistence harvest patterns] other than those that already have been addressed in the Beaufort Sea multiple-sale EIS," despite the fact that the "overall cumulative impacts on subsistence . . . would be significant." EA at 105.

MMS also repeats its assertion from the Multi-Sale EIS that "the conclusion about disproportionate high adverse impacts to low-income and minority populations as a result of an oil spill that was reached for Sale 202 in the multiple-sale EIS does not change in the context of the new information." EA at 36. It is unclear how MMS can reconcile its own conservative prediction of one oil spill and the above statements with the overall conclusion that there will be no significant impacts to subsistence and sociocultural resources.

6. The Conclusions About Impacts to Polar Bears are Arbitrary

Since the Multi-Sale FEIS, MMS has learned that the Southern Beaufort Sea polar bear population may be smaller than previously estimated. EA at 24. Therefore, the maximum sustained yield has also been reduced. *Id.* At 60. In addition, new information since the EIS suggests that climate change is already affecting the polar bears, *see, e.g., id.* at 25, and the oil spill risk to the population has increased since the preparation of the Multi-Sale FEIS. *Id.* at 35.

The Multi-Sale FEIS predicted a loss of 6-10 polar bears to result from Sale 202 and that recovery would occur within a year. *See* EA at 55. The EA for Sale 195 concluded that no significant population level effects from the sale were expected. *Id.* However, MMS explains that the biological potential for polar bears to recover from *any* perturbation is low because of their low reproductive rate. *Id.* at 10 (emphasis added). Therefore, MMS's conclusion about the potential effects to polar bears must change since the previous NEPA analyses. Indeed, MMS notes that the review of new information "modifies" the Multi-Sale FEIS's conclusions. However, MMS fails to state whether the potential effects may be significant. Instead, MMS concludes in this EA that mitigation would "moderate the spill risk" to polar bears, without explaining the degree to which the effects will be moderated.

7. The Significance Criteria are Arbitrary and Unsupported

The significance criteria are arbitrary. MMS uses a significance threshold for biological resources of an adverse impact that will result in a decline taking three or more generations to recover. MMS does not provide scientific justification for the criteria used or explain why three generations of recovery is an appropriate threshold for a variety of different species that have very different reproductive and population trends.

In addition, it is arbitrary to use different significance criteria for the PEA and for Sale 202. Although MMS claims that the criteria in the PEA are merely "more specific," they are in fact completely different, as those for whales are based on a total number of whales harmed rather than on the length of time it would take for the species to recover. *Compare* PEA at 35 *with* EA at 33.

MMS is also inconsistent with the significance criteria for Environmental Justice considerations. MMS initially states that "The [Multi-Sale] EIS defines 'significant' effects on environmental justice as disproportionate, high adverse impacts to low-income and minority populations." EA at 92. The EA however then attempts to define significance more specifically:

This threshold would be reached if one or more important subsistence resource becomes unavailable, undesirable for use, or available only in greatly reduced numbers for a period of 1-2 years; or chronic disruption of

sociocultural systems occurs for a period of 2-5 years, with a tendency toward the displacement of existing social patterns.

Id. at 33. As MMS recognizes, subsistence and sociocultural resources are integral to the everyday life of North Slope communities. “Significant” impacts are not merely those that chronically disrupt a culture or eliminate subsistence resources for several years. Placing an elevated burden on communities for several years before impacts are considered significant is not only arbitrary, but ignores the main intent of the concept of environmental justice, which is to prevent low-income and minority communities from shouldering a disproportionate share of the negative environmental effects of an agency action. *See, e.g.*, Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and accompanying Presidential memorandum (1994).

MMS misapplies its own significance criteria. When applying the three generation significance threshold to fish, MMS finds that there could be an adverse effect lasting three or more generations to specific fish populations. *See EA* at 85. Nonetheless, MMS concludes that this is acceptable because the effects “to the overall regional populations” of fish will be insignificant. *Id.* The loss of a population from one local spawning habitat would be significant. There is no scientific support for MMS’ approach.

8. The Cumulative Effects Analysis is Arbitrary and Incomplete

The EA focuses only on the incremental effects of this one lease sale, not on the cumulative effects of this sale in addition to all OCS activities and all other onshore oil industry activities along the North Slope. *See EA* at 106. A conclusion that “the incremental contribution. . . would likely be quite small” does not assist the reader in understanding the cumulative effect of all of the activities occurring in the Arctic. *Id.*

For example, although MMS points out that FWS concluded that 104 spectacled eiders may be taken as a result of the Northeast Reserve project and that this number is not likely to cause population level effects, *see EA* at 106, it is not clear how many spectacled eiders are expected to die as a result of all of the activities occurring in their habitat or whether this number could cause population level effects.

The EA fails to include an adequate and inclusive discussion of current and potential cumulative impacts for all offshore industrial activities in the marine environment in Alaska and Canada, and on land and coastal waters across Alaska’s North Slope. For example, the EA does not adequately consider the cumulative impacts from past, present, and reasonably foreseeable on-shore activities. Although the EA quotes from the cumulative impacts sections of the EISs for the Reserve, it does not actually assess the cumulative impacts of those and other projects combined with the effects of Sale 202. In addition, the cumulative effects analysis fails to consider state off-shore development. *EA* at 96-97.

MMS also arbitrarily fails to determine the significance of cumulative impacts on subsistence and sociocultural resources including human health. Rather, the analysis segments the impacts of multiple actions and then concludes that each individual impact is insignificant. For example, MMS notes that the Northeast NPR-A Final Amended IAP/EIS states that “[e]xploration and development activities on the North Slope have greatly impacted subsistence activities, as noted during public scoping testimony.” EA at 99. MMS also notes that climate change is exacerbating these impacts. *Id.* Despite these admissions, which are clearly a “significant” impact on the communities of the North Slope, MMS concludes that even though exploration and development from Lease Sale 202 will increase the impacts on subsistence and sociocultural resources, there still will be no cumulative significant impacts.

9. A New Biological Opinion is Required

The proposed lease sale has unacceptable adverse impact on listed species. These impacts warrant a full EIS and render the dated biological opinion upon which MMS relies inadequate.

Although MMS prepared a new Biological Evaluation for Lease Sale 202, this evaluation addresses only the bowhead whales and does not include an analysis for the spectacled or Steller’s eiders. In order for the Fish and Wildlife Service (FWS) to ensure that the eiders are not jeopardized, MMS must prepare a Biological Evaluation of the eiders for Lease Sale 202 and re-initiate consultation with FWS.

FWS and MMS acted arbitrarily in concluding that the October 2002 Biological Opinion was sufficient for purposes of analysis of the effects to eiders from this lease sale. *See* Appendix E, USFWS memorandum to MMS, dated January 2, 2005. The 2002 Biological Opinion is incomplete. For example, the cumulative effects analysis ignores state onshore and offshore activities. The Biological Opinion explains that cumulative effects include state, local, and private actions and that these actions consist of “State of Alaska oil and gas lease sales, exploration, development, and production” Multi-Sale FEIS, Appendix C, 2002 Eiders Biological Opinion (2002 Eiders Biological Opinion) at 19. Yet, the Biological Opinion does not identify what any of these projects might be, whether they are likely, and what cumulative effects may result if those activities occur along with the proposed federal lease sale. Much state activity has occurred since the release of the Multi-Sale FEIS. The Endangered Species Act (ESA) requires that FWS analyze the cumulative impacts from this activity.

This failure calls into question the Biological Opinion’s analysis. The opinion notes that collisions with structures used in exploration may pose a risk of injury or death eiders and that collisions in other areas have resulted in the deaths of “hundreds” of unidentified eiders. 2002 Eiders Biological Opinion at 14-15. The Biological Opinion concludes that best available information does not lead FWS “to believe that significant population-level impacts are likely to result.” 2002 Eiders Biological Opinion at 15. This statement is unsupported by any discussion or evidence and ignores not only the risk

of collision with structures associated with Lease Sales 186, 195, and 202, but also the risk with respect to any of the current or reasonably foreseeable structures associated with the State's proposed offshore lease sales or with current or potential onshore oil and gas activities.

Moreover, since the Biological Opinion was prepared, BLM has approved and sold additional oil and gas leases in the Reserve. These leases should have been considered in the baseline for this project. Thus, a new Biological Opinion is required.

Sincerely,

for Layla Hughes

Deirdre McDonnell
Staff Attorney
EARTHJUSTICE

Layla Hughes

Layla Hughes
Attorney

Exhibit B



EARTHJUSTICE

BOZEMAN, MONTANA DENVER, COLORADO HONOLULU, HAWAII
INTERNATIONAL JUNEAU, ALASKA OAKLAND, CALIFORNIA
SEATTLE, WASHINGTON TALLAHASSEE, FLORIDA WASHINGTON, D.C.

April 25, 2007

SENT BY FAX AND DHL

Dirk Kempthorne, Secretary of the Interior
Department of the Interior
1849 C Street, NW
Washington, DC 20240
Fax: (202) 208-5048

Re: Request for Stay of MMS Approval of Shell Exploration Plan pending resolution of *Alaska Wilderness League, et al. v. Kempthorne, et al.*, No. 07-71457 (9th Cir., filed Apr. 16, 2007)

Dear Secretary Kempthorne,

Pursuant to the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. §§ 1331-56, the Alaska Wilderness League, Natural Resources Defense Council, and Pacific Environment filed a Petition For Review in the Ninth Circuit Court of Appeals challenging the February 15, 2007 decision by the Department of Interior Minerals Management Service (MMS) to approve Shell Offshore, Inc.'s (Shell) Exploration Plan for the Beaufort Sea. Pursuant to Federal Rule of Appellate Procedure 18, we now request that you use your authority as Secretary of the Interior to stay MMS's decision pending resolution of this litigation on the merits.¹

As discussed in more detail below, MMS violated the National Environmental Policy Act (NEPA), 43 U.S.C. §§ 4321, *et seq.*, in multiple ways in approving Shell's Exploration Plan. These violations include, but are not limited to, MMS's failure to assess the potential impacts of an oil spill and its inadequate assessment of potential impacts to wildlife, including polar bears and bowhead whales. These deficiencies render arbitrary MMS's Finding of No Significant Impact (FONSI) for Shell's Exploration Plan, and compel the conclusion that MMS should have prepared an environmental impact statement (EIS).

The legal violations are reason enough to stay the MMS's decision. Those violations, however, are compounded by the risk of serious injury to the Arctic environment and wildlife and to humans who enjoy that environment and wildlife, that flow from MMS's approval. The activities approved by MMS present a serious risk of harm due to oil spills, noise, visual impacts, and other consequences of exploration.

For these reasons, you should stay MMS's decision pending a decision from the Ninth Circuit on the merits of the lawsuit. MMS's decision authorizes Shell to begin exploration activities

in June, 2007. In order to preserve our ability to seek a stay through the judicial system, we request that you act on this request promptly, and no later than May 4, 2007.

FACTUAL AND PROCEDURAL BACKGROUND.

The Beaufort Sea, where Shell plans to conduct its exploration drilling program, is a main artery for bowhead and beluga whale migrations, and its continued health is critical for polar bear and walrus. Estuaries, bays, inlets and river outlets line the Chukchi and Beaufort Sea coasts and provide breeding grounds for millions of birds, including endangered and threatened species such as the spectacled and Steller's eider and Kittlitz's murrelet. Polar cod, capelin, and other fish spawn in these shallow waters and are primary food sources for the Arctic's wildlife.

Federal conservation areas containing unique resources and values are located in, or adjacent to, the Beaufort Sea, near Shell's planned oil exploration activities. For example, the Arctic National Wildlife Refuge is directly onshore of Camden Bay, where Shell is focusing its 2007 activities. The Arctic Refuge and its nearshore waters are an integral ecosystem of tremendous national importance.² The coastal plain of the Arctic Refuge, including the Beaufort Sea lagoons off of the northern coast of the continent, is the "most biologically productive part of the refuge and the heart of wildlife activity."³ The coastal plain of the Refuge also has "outstanding wilderness qualities: scenic vistas, varied wildlife, excellent opportunities for solitude, recreational challenges, and scientific and historic values."⁴

There are other important habitat areas to the west of the Arctic Refuge. These areas, including the Teshekpuk Lake Special Area, Kasegaluk Lagoon, Dease Inlet, and Peard Bay, also could also be affected by Shell's activities.

Shell proposes to drill up to twelve exploration wells on twelve lease tracts in the Beaufort Sea Outer Continental Shelf (OCS) over the next three years. During the summer of 2007, Shell plans to drill four exploration wells at the Sivulliq prospect in Camden Bay offshore of the Arctic Refuge and may drill other wells and 30-40 feet deep holes called well cellars. Shell also has plans to drill at least in two other prospects in Camden Bay, two other prospects farther east off the coast of the Arctic Refuge, and into one prospect off of the eastern boundary of the National Petroleum Reserve-Alaska.⁵

Shell's proposal involves bringing two drilling vessels and two icebreakers to the Beaufort Sea. In addition, Shell will use "several ice-strengthened supply boats," including at least three vessels for "ice management, anchor handling, and supplies." One of these vessels is 150,000-barrel fuel supply ship.⁶ Shell also will operate up to six helicopters and fixed-wing aircraft at any one time.⁷

Shell submitted its final Exploration Plan to MMS in January 2007. With its application, Shell submitted a series of documents, including an oil spill response plan as required by 30 C.F.R. § 254 and 18 AAC 75.425 and an evaluation of potential environmental impacts. MMS reviewed these documents and approved the Exploration Plan on February 15, 2007.

In approving the plan, MMS did not prepare an EIS. Instead, it prepared an environmental assessment (EA) and found that the proposed exploration activities “would not significantly affect the quality of the human environment.”⁸

THE NATIONAL ENVIRONMENTAL POLICY ACT.

NEPA “declares a broad national commitment to protecting and promoting environmental quality.”⁹ The central obligation it imposes for federal agencies is to prepare an EIS for all “major Federal actions significantly affecting the quality of the human environment.”¹⁰ The scope of this requirement is “exceptionally broad,”¹¹ and it is intended to “compel agencies . . . to take seriously the potential environmental consequences of a proposed action.”¹² An “EIS *must* be prepared if substantial questions are raised as to whether a project . . . *may* cause significant degradation of some human environmental factor.”¹³

As a preliminary step in this process, federal regulations allow an agency to conduct a less exhaustive environmental assessment to determine whether the proposed action may significantly affect the environment and, thus, whether an EIS is required.¹⁴ The agency may go ahead with the project in the absence of an EIS only if it determines that the proposed action will have no significant impact on the environment.¹⁵ Otherwise, it must follow the normal process and prepare an EIS.¹⁶

“Because the very important decision whether to prepare an EIS is based solely on the EA, the EA is fundamental to the decision-making process.”¹⁷ Thus, an EA is sufficient only if it provides enough “evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.”¹⁸ The statement of reasons and the EA must show that the agency took a “hard look” at the potential consequences of the proposed action.¹⁹ “If an agency decides not to prepare an EIS, it must supply a ‘convincing statement of reasons’ to explain why a project’s impacts are insignificant.”²⁰

MMS’S FINDING OF NO SIGNIFICANT IMPACT IS ARBITRARY.

In approving Shell’s Exploration Plan without preparing an EIS, MMS violated NEPA in multiple ways. Despite acknowledging that the exploration project presents a risk of small and large crude and refined oil spills, MMS arbitrarily declined to assess the potential impacts of any spill other than a small, 48-barrel diesel fuel spill. It also ignored its own scientists’ conclusions and presented an inadequate assessment of the potential impacts to wildlife, including polar bears and bowhead whales. These facts establish clear cut violations of the law and provide compelling grounds on which to stay MMS’s decision.²¹

MMS Failed to Consider the Potential Impacts of an Oil Spill During the Approved Exploration Activities.

An oil spill during the exploration drilling proposed by Shell could have catastrophic effects on the environment and resources in the Beaufort Sea and adjacent coastal areas. MMS has

acknowledged that there is a risk of a crude oil spill during these types of activities. The agency has consistently included in other environmental reviews the risk of spills during exploration as part of its evaluation of potential impacts from activities associated with offshore oil leasing, and Shell has stated that those risks should be taken in to consideration in the evaluation of this project. Nonetheless, MMS refused to evaluate in its EA the potential effects of a crude oil spill during Shell's exploration activities. According to MMS, its "assumption" that no crude oil spills will occur "is based on the low rate of exploratory drilling blowouts per well drilled and the history of exploration spills on the Arctic OCS."²² MMS cannot avoid evaluating the impacts of a crude oil spill on this basis.

There is a risk of crude oil spills during exploration. Indeed, the EA itself states that crude oil spills have occurred during exploration.²³ Similarly, in the environmental documentation provided with its application, Shell acknowledges that "[o]il spills are also a factor to take into consideration."²⁴ Shell also discusses, albeit in a cursory manner, potential effects to marine fish, benthic organisms, plankton, marine mammals, and birds from crude oil spills.²⁵ Thus, Shell apparently believed that potential impacts from a crude oil spill warranted evaluation.

In addition, both state and federal regulations require spill response plans addressing a crude oil spill during exploration.²⁶ The fact that both federal and state law require spill response plans to address crude oil spills during exploration strongly counsels that MMS cannot ignore such spills in its NEPA analysis. Moreover, despite refusing to evaluate the potential impacts of a crude oil spill, MMS relies on these spill plan laws as a reason that at-risk resources will be protected.²⁷

Further, as part of the NEPA process for all recent Beaufort Sea oil leasing activities, including the lease sales during which Shell acquired the tracts on which it proposes to drill this summer, MMS has calculated the estimated risk of a crude oil spill. These calculations have included the risk of a spill during exploration.²⁸ The underlying studies used in these analyses also reflect consideration of the risk of a crude oil spill during exploration.²⁹ None of these documents characterize the risk of a crude spill during exploration as negligible. Rather, they all show that the risk is a factor considered by the agency at the leasing stage.³⁰

Moreover, exploration drilling, by its very nature, is more likely to result in a significant crude oil spill than development drilling. Exploration drilling is conducted where underground pressures are not known and, if higher than anticipated, could cause a blowout of crude oil into the surface environment.³¹

Further, the potential ramifications of a spill are dramatic. Indeed, MMS documents, including the EIS prepared for the lease sales held in the Beaufort Sea, the EAs that tiered to that document, and the EA at issue in this case, acknowledge that an oil spill likely would have dramatic short and long term effects on the environment, including polar bears, seals, whales, marine and coastal birds, fish, as well as the people who rely on these resources.³² None of those documents, however, examine the potential impacts of a spill from the exploration activities that Shell proposes.

Despite the recognition that a crude oil spill might occur, that a spill is of great public concern, and that spilled oil could have devastating effects, MMS simply refused to consider in its EA the potential impacts of such a spill from the activities authorized in Shell's Exploration Plan.³³ MMS's refusal is based on a determination that the risk of a spill is low. *Id.* MMS simply cannot justify its failure to prepare an EIS on that basis. Here, where there is a non-negligible risk of an event that could have catastrophic consequences, the agency must evaluate the potential impacts associated with that event.³⁴ It cannot rush to complete an EA which ignores potentially significant effects in order to avoid preparing an EIS.

In the EA, MMS did evaluate potential impacts from a 48-barrel refined diesel spill.³⁵ This analysis does not satisfy the agency's NEPA obligations because it does not present an evaluation of the effects of a significant spill of crude oil during exploration. In addition, crude oil and diesel fuel have different chemical properties and will behave differently in the environment. Further, there is a substantial risk of a much larger spill of diesel fuel than MMS acknowledges. The fuel barge that Shell proposes to use will hold at least 150,000 barrels of diesel fuel,³⁶ roughly half of what was spilled during the *Exxon Valdez* disaster. That barge will remain in the project area for the entire five-month exploration season.³⁷ Thus, there is the potential for a much larger spill of diesel fuel than MMS estimates.

Moreover, the potential effects of a spill—either of crude oil or diesel fuel—could be more dramatic than MMS estimates. MMS describes the proposed exploration activities as occurring during the “open water” season.³⁸ In fact, there will be substantial ice cover during much of the time that Shell is conducting exploration activities. The presence of substantial ice would make it much more difficult to clean up an oil spill,³⁹ and could increase the risk of a spill during exploration activities.

For those reasons, MMS acted arbitrarily by failing to evaluate the impacts of an oil spill during Shell's proposed exploration activities.

MMS Inadequately Assessed the Risk to and Potential Impacts on Wildlife from Shell's Exploration Activities.

In an apparent zeal to avoid preparing an EIS, MMS ignored the conclusions of its own staff scientists that the activities authorized in Shell's Exploration Plan would have significant impacts on the environment. For purposes of this request, we focus on just two examples: potential impacts on polar bears and bowhead whales.

MMS Experts Found That The Proposed Action Would Significantly Affect Polar Bears.

The discussion of potential impacts to polar bears in the EA presents little, if any, actual analysis and instead concludes that, although “the projected amount of seismic activity has increased since the multiple-sale EIS was written, the effects from routine, permitted operations on polar bears are still expected to be about the same as described in that

document, with the exception of oil spill impacts.”⁴⁰ Consequently, MMS concluded that the potential impact of Shell’s exploration activities on polar bears is not significant, with the exception of oil spill impacts.

As described above, however, MMS artificially constrained its oil spill analysis by assuming that “no crude oil spills” would occur from exploration activities, and that only a small diesel fuel spill could occur.⁴¹ By so doing, MMS has ignored the conclusions of its own experts about the potential impact of the proposed action on polar bears; experts who unequivocally state “that the Proposed Action has the potential to significantly impact polar bears in the event of a large spill.”⁴²

The issue of the severity of potential impacts on polar bears of oil spills, while raised earlier in the internal review process, is pointedly summarized by MMS’s marine mammal expert in late January 2007 as follows:

I have some serious concerns with the current NEPA process for Shell’s EP, particularly with respect to polar bears. Despite repeated requests over the last many weeks that polar bear issues be addressed by Shell in their EP, and despite John Goll’s letter dated Sept. 5, 2006 outlining the new regional policy for protecting polar bears, and despite the new ITL on Planning for the Protection of Polar Bears, and despite the Lease Sale 202 analysis that clearly showed the potential for significant impacts to polar bears as a result of oil spills during the open water period, and despite the proposed listing of the polar bear as threatened under the endangered species act, and despite verbal assurances that Shell would address these concerns during the “completeness” review, Shell has completely ignored polar bears in their EP....⁴³

These issues were not resolved as of a week later, when MMS held an internal meeting to discuss “issues related to the Shell EP” in preparation for a decision whether to send Shell a letter “regarding data gaps in the EP.”⁴⁴ To summarize this information, MMS prepared an “Exploration Plan Matrix of Issues.”⁴⁵ This matrix includes as a “specific comment” common to all of Shell’s proposed exploration activity locations that

The EP ... does not consider polar bears, thus the proposed action has the potential to SIGNIFICANTLY impact polar bears due to oil spill risk.⁴⁶

That same day, MMS’s marine mammal expert submitted to his superiors within MMS his draft of the EA’s polar bear impact section. It provided, in relevant part:

The MMS is aware of recent decreases in summer sea ice and changes in polar bear distribution and habitat use – particularly in their tendency to aggregate near Cross Island, Kaktovik, and Pt. Barrow in the autumn. Increasing trends in polar bear use of terrestrial habitat in the fall are likely to continue. The MMS realizes that some OCS operations might pose a relatively high spill risk to polar bear aggregations and therefore to polar bear populations as a whole.

If an oil spill occurred in offshore waters, the impacts to the polar bear population would potentially be significant, particularly if it occurred near Kaktovik Barrow.

This review of new information modifies the multiple-sale conclusion that the effects from the proposed action could result in the loss of perhaps 6-10 polar bears, with recovery of populations within about a year [1]. *As a result of the new information considered here, we conclude that if an offshore oil spill occurred, a potentially significant impact to polar bears could result, particularly if areas in and around polar bear aggregations were oiled.* This is because the biological potential for polar bears to recover from any perturbation is low due to their low reproductive rate [1].

The MMS regulations are designed to reduce such impacts by requiring specific mitigation measures for specific exploration and development activities. Prior to commencement of exploration activities, proposed activities are supposed to be analyzed on a case-by-case basis and effective mitigation measures developed accordingly, based on the latest polar bear-population estimates, distribution information, other research results, and the location and timing of the activity. However, that has not happened in this case, even though Shell plans to drill approximately 15 miles offshore of Kaktovik in Camden Bay.

In summary, documented impacts to polar bears to date in the Beaufort Sea by the oil and gas industry appears minimal. Due primarily to increased concentrations of bears on parts of the coast, the relative oil-spill risk to the population has increased since preparation of the multi-sale EIS. *Due to the threats posed to coastal polar bear aggregations from an oil spill during the fall open water period, and because Shell has provided nothing in their EP [1] that addresses potential threats to polar bears, or even indicates that they considered polar bears in their planning process, our overall finding is that the Proposed Action has the potential to significantly impact polar bears in the event of a large oil spill.*⁴⁷

This expert's analysis and conclusions were backed up by yet another MMS expert a few days later:

Polar bears could be significantly affected by development, especially near Kaktovik where they concentrate during the fall open-water period. This was acknowledged in analysis by the non-[threatened and endangered species] analyst (Wilder) in drafts and correspondence I have seen, but apparently his conclusions have been ignored. I concur with Wilder. I believe that MMS should be extremely conservative with analysis of effects on polar bears. In my opinion, the few hundred bears that remain on land, mostly near Kaktovik and Cross Island, may soon be the only remnant of the [southern Beaufort Sea] population, and form the nucleus for any potential recovery.⁴⁸

As noted above, in the final EA, dated just a week later on February 15, 2007, MMS comes to a simple “no significant impact” conclusion, providing no hint of the experts’ analyses or “potentially significant impact” conclusions. The EA is thus arbitrary as it ignores its own experts’ analyses and conclusions, without any discussion.⁴⁹

MMS Inadequately Assessed the Impacts of the Proposed Exploration Activities on Bowhead Whales

Early in the administrative process, experts within MMS identified noise impacts on bowhead whales from activities associated with Shell’s Exploration Plan as a significant concern.⁵⁰ Yet months later, MMS experts were still trying to gather information from Shell on the likely noise levels generated by the proposed exploration activities:

[t]here is no mention made whatsoever . . . of the underwater sound levels which will be generated from the drilling, ice breakers, and support vessels associated with this project, nor of potential impacts from sound to marine mammals. These are critical information needs with respect to NEPA analysis of potential impacts to marine mammals from the proposed activity.⁵¹

Rather than requiring Shell to provide this critical data, MMS apparently decided to rely on the approval of other authorities under separate laws to support its conclusion that Shell’s exploration activities would not have a significant impact on bowhead whales:

The activities proposed in the [Exploration Plan] include [incidental harassment authorizations (IHA)] from [the National Marine Fisheries Service (NMFS)]. NMFS must make a determination of negligible impacts to marine mammals in order to issue an IHA under the [Marine Mammal Protection Act]. Thus, only negligible impacts to bowhead whales are expected to occur as a result of proposed activities.⁵²

This conclusion cannot be supported for two reasons. First, MMS does not explain how it dealt with internal MMS analysis on this issue, dated just a week before the EA was signed, which stated the following:

This action has high potential for causing considerable disturbance over a great distance in areas including some of those historically used by high numbers of bowheads during their summer feeding and/or migration period. . . . [W]e cannot rule out potential significant effects on bowheads from this noise and disturbance both from the action itself, and particularly we cannot rule out potential significant cumulative effects on bowheads.

Because of the high potential for drilling noise and especially icebreaker noise to cause bowheads to avoid or to leave important habitat, MMS needs to look at the actual number of drill rigs and especially the icebreakers that will be present, their size and class, their engines and other noise-makers, their

expected noise outputs, . . . , and then do site specific analyses that takes [sic] into consideration the likely use (based on historic data) of the area by bowheads, including females and calves. Since we now have site specific information about where activities are likely to occur, and industry has specific information about the icebreakers that will be used, the support vessels, the drilling rigs, and aircraft support, MMS should consider total noise and disturbance budgets

Richardson et al. [] concluded that

... Reaction distances around an actual icebreaker ... are predicted to be ... on the order of 10-50 km. Effects of an actual icebreaker on migrating bowheads, especially mothers and calves, could be biologically significant.

Thus, MMS should conclude that significant effects on bowheads, especially cumulative effects are possible.⁵³

The EA does not discuss the issues raised in this analysis.⁵⁴ It is thus arbitrary as it ignores its own experts' analysis and conclusions.⁵⁵

Second, MMS cannot rely on NMFS's compliance with the Marine Mammal Protection Act to satisfy MMS's own obligations under NEPA. NMFS has not yet made a determination about the IHA. Moreover, MMS cannot rely on compliance with one set of legal duties as a substitute for compliance with other legal duties.⁵⁶ The "no negligible impact on species or stock" MMPA standard relied upon by MMS in its EA is not equivalent to a "no significant impact on the human environment" standard under NEPA.

MMS'S DECISION RISKS SIGNIFICANT INJURY TO THE ARCTIC AND ARCTIC WILDLIFE.

Members, board members, and staff of the Alaska Wilderness League, Natural Resources Defense Council, and Pacific Environment use and enjoy the area in and around the Beaufort Sea, including the Arctic Coastal Plain and coastal plain of the Arctic Refuge, for numerous purposes, including wildlife viewing, study and photography, as well as its pristine wilderness qualities and recreational opportunities. While Shell plans to explore in the offshore environment, impacts from those activities can harm the wilderness and recreation values of the coastal plain through industrial activity and its associated oil spills, noise, and visual attributes.

Initially, Shell's exploration has the potential to harm the resources and values in the area because it poses a risk of an oil spill. "Spilled oil can have dramatic and lethal effects on marine mammals, as has been shown in numerous studies, and a large oil spill could have major effects on polar bears and seals, their main prey."⁵⁷ According to MMS, an oil spill "would affect the bears' reproduction, survival, and immune systems."⁵⁸ "Due to seasonal

distribution of polar bears, the times of greatest impact from an oil spill are summer and autumn,”⁵⁹ which are the times during which Shell plans to conduct exploration activities. Ultimately, “[a]ny bears lost to a large oil spill . . . likely would exceed sustainable levels,” and could affect “both bear productivity and subsistence use, and potentially caus[e] a decline in the bear population.”⁶⁰ An oil spill also could have dramatic effects on other species, including whales, marine and coastal birds, and fish.⁶¹

These effects would last for many years. Oil spilled from the *Exxon Valdez* persisted in coastal areas in “surprising amounts and toxic forms” and “was sufficiently bioavailable to induce chronic biological exposures in animals for more than a decade, resulting in long-term impacts at the population level.”⁶²

Moreover, MMS has estimated that there is a substantial likelihood that crude oil from a spill in the area in which Shell proposes to drill would reach important resource areas. Because all exploration drilling will occur within the bowhead migration corridor, “any spill that occurred at a drill site would contact the bowhead migration corridor.”⁶³ The agency estimates up to a 49% chance that a spill would contact the shore of the Arctic National Wildlife Refuge.⁶⁴

Even if no oil spill occurs, however, activities authorized by the Exploration Plan pose a substantial risk to wildlife and petitioners’ interests in wildlife and the coastal plain.⁶⁵ As the Department of the Interior has stated, the wilderness and recreation values of the Arctic Refuge coastal plain “would be destroyed by the addition of oil facilities” in that area.⁶⁶

Further, bowhead whales, which migrate through the Beaufort Sea are likely to be seriously harmed by the noise generated from ice breaking by ships, the continuous use of industrially equipped vessels, and offshore drilling by mobile drill ships. “Vessels are the greatest anthropogenic contributors to overall noise in the sea,” and large, heavily laden ships, as are utilized during exploration activities, typically generate the greatest amount of noise.⁶⁷ “[A]ctive ice-management,” is even louder and, in fact, is expected to be one of the two “greatest noise sources in the Beaufort Sea OCS during the time period of the proposed activities” under the Exploration Plan.⁶⁸

Bowhead whales are particularly susceptible to harm by anthropogenic noise in the marine environment, which can affect important behaviors and biological functions. For example, studies suggest that noise from vessels interferes with bowhead breathing.⁶⁹ Noise can also interfere with bowheads’ ability to hear and communicate, and consequently their ability to navigate, locate open water, and avoid predators.⁷⁰ Moreover, loud noise may cause physiological damage to bowheads, and can affect immune function.⁷¹

Accordingly, bowheads will likely avoid the constant loud noise caused by drilling and ice breaking activities. “Bowheads may avoid drilling noise at 20-30 kilometers”⁷² Such drilling will occur within the bowhead migration corridor, with the likely result of deflecting bowheads away from the shoreward portion of the corridor where they will no longer be visible to visitors to the coastal plain of the Arctic Refuge.

Bowheads also may be killed or injured in the event that they are struck by vessels, which has apparently occurred with increasing frequency in recent years.⁷³ Vessels traffic within the bowhead migration corridor, as authorized under the Exploration Plan, further increases the risk of collisions that injure or kill bowheads.

In addition, aircraft traffic associated with exploration drilling also poses a substantial risk of harm to caribou. Helicopter flights between Kaktovik and drilling sites may disturb the porcupine caribou herd.⁷⁴ Similarly, noise generated by icebreaking ships may disturb polar bears and cause them to avoid preferred feeding areas. As a consequence of the fragmentation of sea ice caused by icebreaking ships, bears may expend more energy, with potential impacts to polar bears such as “reduced weight and condition and corresponding reduction in survival and recruitment rates.”⁷⁵

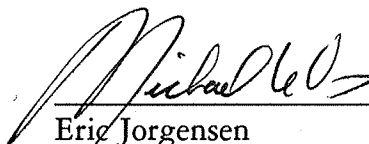
Vessels will travel between proposed drill sites that are located within the migration corridor for threatened spectacled eiders, “and collisions with drill structures or support vessels could occur.”⁷⁶ MMS has acknowledged that “[e]iders may be particularly vulnerable [to collisions with vessels and offshore structures] due to their flight behavior.”⁷⁷ Spectacled eiders that collide with vessels or drilling structures would be injured or killed.⁷⁸ Moreover, spectacled and Steller’s eiders nest throughout the Arctic coastal plain, including areas that will be subjected to disturbance from helicopters associated with exploration activities. Helicopter overflights may disturb nesting eiders and consequently impair feeding and displace female eiders from nests and eggs or preferred nesting or brood rearing sites.⁷⁹

These harms to wildlife populations will likely impair the use and enjoyment of such wildlife by visitors to the coastal plain of the Arctic Refuge and nearby waters. In addition to harming wildlife, the noise associated with vessel traffic, oil drilling and helicopter overflights will intrude upon and destroy the natural tranquility and other pristine wilderness qualities enjoyed by visitors to the coastal plain of the Arctic Refuge and nearby waters. The visual blight caused by drillships on the horizon will further degrade visitors’ use and enjoyment of the Refuge and nearby waters.

CONCLUSION

MMS acted arbitrarily in approving Shell’s plan to conduct exploration activities in the Beaufort Sea. It did not evaluate the potential impacts from an oil spill and failed to examine fully the effects on wildlife, including polar bears and bowhead whales. The activities approved by MMS are likely to cause substantial harm to Alaska Wilderness League, Natural Resources Defense Council and Pacific Environment, their members and staff. Staying these activities will protect the public interest in “promot[ing] efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man”⁸⁰ and help ensure that MMS complies with NEPA before activities occur in the Beaufort Sea.⁸¹ Accordingly, you should stay the approval of Shell’s Exploration Plan pending resolution of the ongoing litigation in the Ninth Circuit Court of Appeals.

Sincerely,



Eric Jorgensen
Deirdre McDonnell
Michael LeVine
Clayton Jernigan
EARTHJUSTICE
325 Fourth Street
Juneau, AK 99801
Ph: (907) 586-2751
Fax: (907) 463-5891

Peter Van Tuyn, of Counsel
BESSENYEY & VAN TUYN
310 K Street #200
Anchorage, AK 99501
Ph: (907) 278-2000
Fax: (907) 278-2004

Cc: Matthew Sanders
Shell Offshore, Inc.

ENDNOTES:

¹ See 43 C.F.R. § 4.5(a)(2) (stating that the Secretary possesses authority to “review any decision of any employee or employees of the Department . . . or to direct any such employee or employees to reconsider a decision”); see also 43 U.S.C. § 1201 (“The Secretary of the Interior, or such officer as he may designate, is authorized to enforce and carry into execution, by appropriate regulations, every part of the provisions of this title not otherwise specifically provided for.”).

² See e.g., *United States v. Alaska*, 521 U.S. 1 at 55 (1997) (noting that “the purpose of the [Arctic Refuge]—protecting the habitats of various species found along the coast . . . —supported inclusion of submerged lands within [it]”).

³ U.S. Fish and Wildlife Service, *A Preliminary Review of the Arctic National Wildlife Refuge, Alaska Coastal Plain Resource Assessment: Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Statement* (1995) at 19.

⁴ U.S. Department of the Interior *Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment: Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Statement* (1987) (Arctic Refuge FLEIS) at 46; see also U.S. Fish and Wildlife Service, *Arctic National Wildlife Refuge, Coastal Plain Resource Assessment – Final Report: Baseline Study of Fish, Wildlife, and Their Habitats* (1986) at 480 (further describing unique wilderness and recreation attributes of Arctic Refuge coastal plain).

⁵ Minerals Management Service, *Environmental Assessment, Shell Offshore, Inc. Beaufort Sea Exploration Plan, OCS EIS/EA, MMS 2007-009* (February 2007) (EA) at 2-3.

⁶ Shell Offshore, Inc., *Beaufort Sea Outer Continental Shelf Lease Exploration Plan, 2007-2009* (January 2007) (Shell Exploration Plan) at 49.

⁷ EA at 2-4.

⁸ Minerals Management Service, *Finding of No Significant Impact (FONSI)* (February 15, 2007).

⁹ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989); see 42 U.S.C. § 4331. The law is also clear that NEPA applies to MMS’s OCSLA decision-making. See 30 C.F.R. § 250.232(c) (stating that MMS must “evaluate the environmental impacts of the activities described in your proposed EP [exploration plan] and prepare environmental documentation under [NEPA] and the implementing regulations”); see also *Vill. of False Pass v. Clark*, 733 F.2d 605, 609 (9th Cir. 1984) (“Under OCSLA’s general environmental provision, NEPA also applies to each stage [more specifically, the exploration stage,] of its own force and effect.”); 43 U.S.C. § 1866(a) (stating that OCSLA, unless expressly provided, does not modify NEPA or other statutes).

¹⁰ 42 U.S.C. § 4332(C).

¹¹ *Found. for N. Am. Wild Sheep v. United States Dep’t of Agric.*, 681 F.2d 1172, 1177 (9th Cir. 1982).

¹² *Ocean Advocates v. United States Army Corps of Eng’rs*, 402 F.3d 846, 864 (9th Cir. 2005).

¹³ *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998) (citation omitted) (emphasis in original); see also *Found. for N. Am. Wild Sheep*, 681 F.2d at 1178 (“A determination that significant effects on the human environment will in fact occur is not essential. . . . If substantial questions are raised whether a project may have a significant effect upon the human environment, an EIS must be prepared.”).

¹⁴ *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 730 (9th Cir. 2001); *see also* 40 C.F.R. §§ 1501.4(b) & 1508.9.

¹⁵ *See Anderson v. Evans*, 371 F.3d 475, 488 (9th Cir. 2004).

¹⁶ *See, e.g., Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (quoting *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717 (9th Cir.1988)); *see also id.* at 1211 (stating that the decision not to prepare an EIS will be upheld only if it is “fully informed and well-considered”) (quoting *Save the Yaak Comm.*, 840 F.2d at 717).

¹⁷ *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).

¹⁸ *Anderson*, 371 F.3d at 488 (citation omitted); *see also Metcalf*, 214 F.3d at 1143 (“The purpose of an EA is to provide the agency with sufficient evidence and analysis for determining whether to prepare an EIS or to issue a FONSI.”) (citing 40 C.F.R. § 1508.9).

¹⁹ *See Anderson*, 371 F.3d at 486.

²⁰ *Blue Mountains Biodiversity Project*, 161 F.3d at 1212 (citations omitted).

²¹ MMS also violated NEPA by relying on hypothetical or uncertain mitigation measures to excuse limited impact review, inadequately assessing cumulative impacts, including those from global warming, and failing to provide a sufficient public process prior to making its decision. In an effort to present a concise request, we focus on the violations explained above.

²² EA at 26.

²³ *See id.* at 74-75, Table II-4 (showing crude spills during exploration); *see also id.* at 32 (stating that small crude oil spills “may occur and would be typical during the proposed action”) & 45.

²⁴ *See Shell Exploration Plan*, App. G, Environmental Report, at 31); *see also id.* at 32 (stating that “[f]uel or oil spills could occur during exploratory operations”).

²⁵ *Id.* at 29-32.

²⁶ *See* 30 C.F.R. §§ 254.1 & 6 (requiring a plan for the owner or operator of “any structure, group of structures, equipment, or device . . . used for [e]xploring for [or] drilling for” oil); 18 AAC 75.425(I). This plan must address crude oil spills, including very large spills. *See id.*; *see also* 30 C.F.R. 254.23(g) (requiring emergency response action plan to include procedures to follow for different spill sizes).

²⁷ EA at 2, 24.

²⁸ *See* Minerals Management Service, Final Environmental Impact Statement, Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202, OCS EIS/EA MMS 2003-001 (February 2003) (Multi-Sale FEIS) at A-1-1 (“We analyze oil spills and their relative impact to environmental, economic, and sociocultural areas and the coastline, which could result from offshore oil exploration and development in the Beaufort Sea Planning Area.”); Minerals Management Service, Environmental Assessment, Proposed OCS Lease Sale 202, Beaufort Sea Planning Area, OCS EIS/EA MMS 2006-001 (August 2006) (Lease Sale 202 EA) at App. C, p. C-1 (“To estimate large oil-spill occurrence for future exploration, development, and production in the Beaufort Sea OCS, and to identify their principal causal factors and sensitivities to these, a fault tree-analysis was used.”); Minerals Management Service, Environmental Assessment, Proposed Oil and Gas Lease Sale 195, Beaufort Sea Planning Area, OCS EIS/EA MMS 2004-028 (July 2004) (Lease Sale 195 EA) at App. B, p. 1 (same).

²⁹ See Attachment 1 at 1.1 (“MMS implemented the present study to develop and apply alternative methodologies for the assessment of oil spill rates associated with exploration and production facilities and operations in deeper waters in the Chukchi and Beaufort Seas.”) & 2.3 (explaining the way in which wells were considered in the analysis) (2002 Bercha Report); Attachment 2 at *i* (updating the 2002 report and including “exploration, production, and abandonment” in scenario) (2006 Bercha Report); Attachment 3 at 1 (“Because oil spills may occur from activities associated with offshore oil exploration, production, and transportation resulting from these lease sales, the Minerals Management Service (MMS) conducts a formal oil-spill risk analysis (OSRA) to support the environmental impact statement (EIS) completed prior to conducting the proposed leasing of this area.”) (Multi-Sale EIS OSRA).

³⁰ See, e.g., Multi-Sale FEIS at A-1-13 (estimating a 5-6% chance of a crude oil spill from a platform or well).

³¹ See Attachment 4 at 10-11 (explaining the risks of drilling exploration wells) (WWF Report).

³² Multi-Sale FEIS at I-7; Lease Sale 202 EA at 42-49, 51, 54-59, 65, 81-85.

³³ See EA at 26 (“For purposes of this EA analysis, no crude oil spills are assumed from exploration activities.”).

³⁴ See *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm’n*, 449 F.3d 1016, 1032 (9th Cir. 2006) (“If the risk . . . is not insignificant, then NEPA obligates the [agency] to take a ‘hard look’ at the environmental consequences of that risk.”); 40 C.F.R. § 1508.22(b) (“‘[R]easonably foreseeable’ includes impacts which have catastrophic consequences, even if their probability of occurrence is low . . .”).

³⁵ See EA at 26.

³⁶ See Shell Exploration Plan at 49.

³⁷ *Id.*

³⁸ See EA at 1.

³⁹ See Attachment 4 at 5 (WWF Report).

⁴⁰ EA at 35.

⁴¹ See *supra* discussion of oil spills. See also EA at 26.

⁴² Attachment 6 (2/2/07 James Wilder e-mail, attachment at Section IV.C.2.e(4)).

⁴³ Attachment 7 (1/26/07 James Wilder e-mail) (emphasis in original).

⁴⁴ Attachment 8 (2/2/07 Casey Buechler e-mail).

⁴⁵ *Id.* spreadsheet attachment.

⁴⁶ *Id.* (emphasis in original).

⁴⁷ Attachment 6 (2/2/07 James Wilder e-mail, attachment at Section IV.C.2.e(4)) (emphasis added, citations omitted).

⁴⁸ Attachment 9 (2/7/07 Charles Monnett e-mail, attachment at 1); see also Attachment 5 (Gleason review).

⁴⁹ See, e.g., *Anderson*, 371 F.3d at 488 (citation omitted); *Metcalf*, 214 F.3d at 1143 (EA must show that the agency took a “hard look” at the potential consequences of the proposed action).

⁵⁰ See e.g., Attachment 10 (10/30/06 Lisa Rotterman e-mail) (“Bowhead . . . response to icebreaking can be VERY large.”) (emphasis in original).

⁵¹ Attachment 11 (Wilder Comment on EP and Oil Spill Response Plan at 1-2, attached to 1/16/07 James Wilder e-mail); see also Attachment 12 (1/23/07 James Wilder e-mail) (“The item I repeatedly asked for in the completeness review is still incomplete i.e. information regarding the sound to be generated by the vessels, ice management operations, and drilling.”). Between October 2006 and mid-January, 2007, MMS personnel identified this critical data gap multiple times. See e.g., Attachment 13 (12/6/06 James Wilder e-mail) (“Shell has provided no info whatsoever on sound levels which will be generated by their activities . . .”); Attachment 14 (1/8/07 Brad Smith e-mail) (noting that Shell has not provided information about take of whales from ice-breaking activities and that such information should be considered); Attachment 15 (1/9/07 Wayne Crayton e-mail) (including information about noise level thresholds for marine mammals and whales and noting lack of noise level information from Shell).

⁵² EA at 31.

⁵³ Attachment 9 (2/7/07 Charles Monnett e-mail, attachment at 2-3) (emphases omitted).

⁵⁴ See EA at 27-31.

⁵⁵ See *Anderson*, 371 F.3d at 489-93; *Metcalf*, 214 F.3d at 1143 (EA must show that the agency took a “hard look” at the potential consequences of the proposed action).

⁵⁶ See *Seattle Audubon Society v. Evans*, 771 F. Supp. 1081, 1093 (W. D. Wash. 1994), *aff’d*, 952 F.2d 297 (9th Cir. 1991) (noting that “[a] review of proposed sales by the FWS would not be a substitute for compliance with NFMA”).

⁵⁷ Lease Sale 202 EA at 56 (internal citations omitted).

⁵⁸ *Id.* at 58.

⁵⁹ *Id.* at 56.

⁶⁰ *Id.* at 59 (internal citations omitted).

⁶¹ See *id.* at 42-49 (describing significant mortality to marine and shore birds, including threatened spectacled and Steller’s eiders, from spilled oil), 54 (stating that the decline in the number of killer whales following the Exxon Valdez oil spill “suggests that whales may be severely impacted by an oil spill”) (citation omitted), 65 (stating that ringed seals, spotted seals, bearded seals, walrus, and beluga and gray whales could be killed by spilled oil), & 81-85 (describing the potential effects of an oil spill to salmon).

⁶² *Id.* at 58.

⁶³ EA at 31; see also Attachment 16 (1/29/07 Caryn Smith e-mail) (“However, the proposed drill sites are all located within the broad corridor through which bowheads migrate; for that reason, there is a 100% chance of any spill at the drill sites contacting the bowhead migration corridor.”) (internal citation omitted).

⁶⁴ EA at 72; *see also id.* at 32, 44 & 72 (indicating that there is up to a 16% chance that spilled oil would contact areas important to marine birds, including threatened eiders, within 30 days).

⁶⁵ *See e.g.*, Arctic Refuge FLEIS at 22, 25, 34, 46, 120, 129-33, 136-37; International Porcupine Caribou Management Board, Sensitive Habitats Of the Porcupine Herd at 14, 17 (1993); U.S. Fish and Wildlife Service, Fish Population Characteristics of Arctic National Wildlife Refuge Coastal Waters 1 (1988).

⁶⁶ Arctic Refuge FLEIS at 144.

⁶⁷ EA at 60.

⁶⁸ *Id.*

⁶⁹ *See* Lease Sale 202 EA at 54.

⁷⁰ *See* Minerals Management Service, Final Programmatic Environmental Assessment, Arctic Ocean Outer Continental Shelf Seismic Surveys, OCS EIS/EA MMS 2006-038 (June 2006) at 114.

⁷¹ *See id.* at 114, 116-17 (“[A]nthropogenic sound is a potential ‘stressor’ for marine mammals. Not only can loud or persistent noise impact the auditory system of cetaceans, it may impact health by bringing about changes in immune function, as has been shown in other mammals . . .”) (internal punctuation and citation omitted).

⁷² Lease Sale 202 EA at 54 (quoting Arctic Region Biological Opinion); *see also* EA at 28-29 (indicating that bowheads have previously altered their traditional migration route in the Beaufort Sea).

⁷³ *See* National Marine Fisheries Service, Biological Opinion for Oil and Gas Leasing Activities in the Beaufort/Chukchi Seas (June 16, 2006) at 32.

⁷⁴ *See* Dave Yokel, ed., Proceedings of Teshekpuk Lake Area Caribou/Waterfowl Analysis Workshop at 21; *see also* Bureau of Land Management, Final Amended Integrated Activity Plan/Environmental Impact Statement, Northeast National Petroleum Reserve—Alaska, Vol. 1, BLM/AK/PL-05/006+1610+930 (Jan. 2005) at 4-108.

⁷⁵ Endangered and Threatened Wildlife and Plants; 12-Month Petition Finding and Proposed Rule To List the Polar Bear (*Ursus maritimus*) as Threatened Throughout Its Range 72 Fed. Reg. 1064, 1072 (Jan. 9, 2007).

⁷⁶ EA at 33.

⁷⁷ Lease Sale 202 EA at 44.

⁷⁸ *See, e.g.*, Beaufort Sea Planning Area Multi-Sale EIS, Eider BiOp (App. C) at 15 (documenting sea duck fatalities from collisions with offshore oil structures).

⁷⁹ *Id.* at 12.

⁸⁰ 42 U.S.C. § 4321.

⁸¹ *See Seattle Audubon Soc’y v. Evans*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991), *aff’d*, 952 F.2d 297 (9th Cir. 1991) (requiring federal agencies to act in accordance with the law is “a public interest of the highest order.”).

TABLE OF ATTACHMENTS

<u>Attachment No.</u>	<u>Description</u>
Attachment 1	Bercha Group, Alternative Oil Spill Occurrence Estimators for the Beaufort and Chukchi Seas – Fault Tree Method, Final Report, Volume I, OCS Study MMS 2002-047 (Aug. 2002) (“2002 Bercha Report”)
Attachment 2	Bercha Group, Alternative Oil Spill Occurrence Estimators and Their Variability for the Beaufort Sea – Fault Tree Method, Final Report, Volume I, OCS Study MMS 2005-061 (Jan. 2006) (“2006 Bercha Report”)
Attachment 3	Minerals Management Service, Oil-Spill Risk Analysis: Beaufort Sea Planning Area, Sales 186, 195, and 202, OCS Report MMS 2002-058 (Sept. 2002) (“Multi-Sale EIS OSRA”) (excerpts)
Attachment 4	Elise DeCola, <i>et al.</i> , Offshore Oil Spill Response in Dynamic ice Conditions: A Report to WWF on Considerations for the Sakhalin II Project. Alaska, Nuka Research (April 2006) (“WWF Report”)
Attachment 5	Jeffrey Gleason, Review of draft Environmental Assessment of Shell EP (undated)
Attachment 6	E-mail from James Wilder, MMS, Thomas Newbury, MMS, Re: Shell EP: EA sections (Feb. 2, 2007)
Attachment 7	E-mail from James Wilder, MMS to Newbury, MMS, et al., Re: Shell EP: Polar bear issues and NEPA concerns (Jan. 26, 2007)
Attachment 8	E-mail from Casey Buechler, MMS, to Elinore Anker, et al., Re: Summary of Shell EP Issues (Feb. 2, 2007)
Attachment 9	E-mail from Charles Monnett, MMS, to Lisa Rotterman, MMS, et al., Re: Shell EP EA Review (Feb. 7, 2007)
Attachment 10	E-mail from Lisa Rotterman, MMS, to Thomas Newbury, MMS, et al., Re: Shell’s EP (Oct. 30, 2006)
Attachment 11	Wilder Comment on EP and Oil Spill Response Plan, attached to e-mail from James Wilder, MMS, to Thomas Newbury, MMS, et al., Re: Shell’s monitoring objectives (Jan.16, 2007)
Attachment 12	E-mail from James Wilder, MMS, to Thomas Newbury, MMS, Re: Shell’s updated EP [] (Jan. 23, 2007)

- Attachment 13 E-mail from James Wilder, MMS, to Brad Smith, NOAA, Re: Shell Exploration Plan – Camden Bay (Dec. 6, 2006)
- Attachment 14 E-mail from Brad Smith, NOAA, to James Wilder, MMS, Re: Shell’s IHA application for their 2007 open-water drilling (Jan. 8, 2007)
- Attachment 15 E-mail from Wayne Crayton to Michael Salyer, et al., Re: IHA application (Jan. 9, 2007)
- Attachment 16 E-mail from Caryn Smith, to Thomas Newbury, MMS, Re: Shell EA and Summarized OSRA Conditional Probabilities (Jan. 29, 2007)