

Appendix A: Summary of Comments and Responses

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Appendix A: Summary of Comments and Responses

A preliminary best interest finding was issued on April 2, 2009. The period for public comment, written or oral, was from April 2, 2009 through June 1, 2009; the comment period was then extended through August 31, 2009. Written and oral comments were accepted at three public hearings held in Barrow on May 11, 2009; in Nuiqsut on May 12, 2009; in Kaktovik on May 19, 2009; and by teleconference in Wainwright on May 21, 2009. ADNR also held an informational meeting in Anchorage on May 21, 2009. Attendance at the public hearings is presented in Table A.1. Written comments were also accepted by mail, email or fax.

Comments were received from the North Slope Borough; Trustees for Alaska, representing Alaska Wilderness League, Rosemary Ahtuanguaruk, Center for Biological Diversity, Defenders of Wildlife, Gwich'in Steering Committee, Native Village of Point Hope, Natural Resources Defense Council, Northern Alaska Environmental Center, Pacific Environment, Resisting Environmental Destruction on Indigenous Lands (REDOIL), Sierra Club, and The Wilderness Society; Crag Law Firm of Portland, OR representing the Inupiat Community of the Arctic Slope and the Alaska Eskimo Whaling Commission; ADF&G; USFWS; and the Alaska Oil and Gas Association. Comments were also received from individuals. A total of 35 comments was received, including 20 through oral testimony and 15 written¹. A packet of letters to President Obama from school children was submitted at the public hearing in Nuiqsut.

As required by AS 38.05.035(e)(7), this appendix contains a summary of the comments received and ADNR's responses to them. Section A addresses common issues raised. Section B addresses individual issues.

Section A of this appendix provides summaries and responses to several common issues expressed by commenters. These include concerns about oil spills; greenhouse gases, climate change, and global warming; phasing; information, data, and studies used in the finding; cumulative effects; subsistence and bowhead whales; effectiveness of mitigation measures; input from local communities and Native organizations; directional drilling; tract deferrals and deletions; State of Alaska best interest finding process and federal environmental impact statement process; need for additional studies; and the Alaska Coastal Management Program. Most comments provided as oral testimony fell into the common issues categories found in Section A and are thus responded to there. Letters to President Obama addressed concerns about oil spills and subsistence, issues which are responded to in Sections A1 and A6 below.

Section B provides summaries of specific comments submitted in writing by individuals and organizations, and ADNR's response.

¹ Includes documents submitted in support of oral testimony. Only written comments that were submitted separately from oral testimony, or that presented issues or concerns that were significantly different from oral testimony, are summarized in Section B.

Table A.1. Attendance at public meetings held by ADNR to receive comments on the preliminary Beaufort Sea best interest finding.

Public meeting in Barrow, May 11, 2009 attendees:	
Jemming, Jonathon	Olemaun, George*
Kolash, Karla (sp)	Olemaun, Ida* (read a resolution from the ICAS and testified on her own behalf)
Price Leavitt* (Executive Director, Inupiat Community of the Arctic Slope)	

Public meeting in Nuiusut, May 12, 2009 attendees:	
Ahnupkana, Marge*	Nukapigak, Ed*
Ahtuanguaruak, Rosemary* (Member, Executive Board, Inupiat Community of the Arctic Slope Regional Tribal Council; Inupiat Community Arctic Slope of the Arctic Slope)	Nukapigak, Jimmy*
Dixon, Tom*	Nukapigak, Maniksaq
Kaigelak, Bernice* (President, Native Village of Nuiqsut; Vice President, Kuukpik Corporation; Chairman, Arctic Slope Native Association; also testified on her own behalf.)	Nukapigak, Isaac* (President, Kuukpik Corporation)
Kaigelak, Maggie	Sielak, George (sp)
Leavitt, Dora* (Council Member, City of Nuiqsut)	Sielak, Willie (sp)
Matumeak, Frank*	Tuck Helen
Motummam, Gordon (sp)	Kovalsky, Maggie* (Member, Kuukpik Corporation)

Public meeting in Kaktovik, May 19, 2009 attendees:	
Akootchook, Clarice*	Sims Kayotuk, Carla*
Burns, Nora Jane*	Kayotuk, Lee* (City of Kaktovik Impact Liaison Office)
Fritz, Stacy*	Mikow, Elizabeth
Inglengosek, Bruce (sp)	Thomson, Robert*
Kalek, Fred	

Informational meeting in Anchorage, May 21, 2009 attendees:	
Hoffman, Dale (Pioneer Natural Resources)	Seaberg, Stewart (Arctic Slope Regional Council, Energy Services)
Johnson, Kathryn (Arctic Slope Regional Council, Energy Services)	Turner, Michelle (Arctic Slope Regional Council, Energy Services)

* Attendees who testified; some attendees provided testimony on behalf of themselves and an organization, so that the total number of comments received through oral testimony (20) is greater than the number of attendees who provided oral testimony.

A. Common Issues

1. Oil Spills

Comment Summary: *Concerns were expressed regarding the sufficiency of discussion of oil spills, with emphasis on cleanup in broken ice.*

ADNR Response: Chapter Six discusses at length oil spill risk, prevention, and response, including in broken ice conditions. This chapter discusses the history of oil spills in the area (Section F1); risks at the exploration and production phases as well as risks associated with pipelines, marine terminals, and tankers (Section F2); oil spill prevention (Section F3); oil spill response, including the incident command system, response teams, training, response organizations, and Geographic Response Strategies (Section F4); cleanup and remediation (Section F5); and government regulation of oil spill prevention and response, industry contingency plans, financial responsibilities, government contingency plans, and oil spill mitigation measures included in the finding for the Beaufort Sea (Section F6).

Before any lessee may commence operations, AS 46.04.030 requires an approved oil discharge prevention and contingency plan (C-Plan), including a spill response action plan, a description of spill prevention measures at the facility, and supplemental background and verification information.

Spill cleanup techniques include boom and skimmers, in-situ burning and dispersants. Under 18 AAC 75.434 operators must be able to mechanically entrain and recover, within 72 hours, a response planning standard (RPS) volume of oil. For exploration facilities, the RPS is a minimum of 16,500 bbl plus 5,500 bbl for each of 12 days beyond 72 hours. For production facilities, the minimum RPS is 3 times the annual average daily production for the maximum producing well at the facility.

2. Greenhouse Gases, Climate Change, and Global Warming

Comment Summary: *Concerns were expressed regarding discussion of greenhouse gases, climate change, and global warming.*

ADNR Response: Climate change was discussed in the preliminary finding in Chapter Three, Section E. Issues of global scope are beyond the scope of a statutory best interest finding. Effects concerning unknown future projects are not included because speculation would be required about possible future effects subject to future permitting that cannot reasonably be determined until a project or proposed use is more specifically defined (AS 38.05.035(h)). Details that are unknown at this time include numbers, sizes, and types of projects, and technology that may be available that could affect emissions. Some general information about fugitive emissions from oil and gas production, processing, transmission, and distribution of oil and gas are available and are discussed in Chapter Eight, Sections A1 and A2.

3. Phasing

Comment Summary: *Concerns were expressed regarding a phased approach, including the constitutionality of phasing and the sufficiency of review at later phases.*

ADNR Response: Phased review is statutorily authorized by AS 38.05.035(e)(1)(C). As discussed in detail in Chapter Two, Section G, the statutory criteria for phasing have been met for the Beaufort Sea oil and gas lease sales. The constitutionality of phasing is beyond the scope of a best interest finding. A best interest process for post-lease phases is not required by statute. The commentary to the statute states that “no other best interest finding is required after the disposal phase.”

SB 156 Sections 1 (c) and (d) state the legislature’s purpose in amending AS 38.05.035 in 1994:

Although the legislature did intend that there would be a detailed review of the project at any later phase, the legislature did not intend that the Department of Natural Resources would have to issue another best interest finding as part of the review” ... [W]hen passing the 1994 amendments, the legislature was aware that the post-disposal phases, which are exploration, development , and transportation, would be subjected to numerous federal, state, and local laws, regulations, policies, and ordinances; reviewed by numerous agencies; and subjected to public review and comment.

Applications for permits and plans of operation generally require public notice and opportunity for public input. Chapter Seven describes many of the other permits and approvals required by local, state, and federal agencies for oil and gas exploration, development, and production.

4. Information, Data, and Studies Used in the Finding

Comment Summary: *Concerns were expressed regarding ADNR’s efforts to update information in the Beaufort Sea finding, the sufficiency of information, data, or studies considered and discussed, information provided to ADNR but not used, and the appropriateness of studies included in the finding. Concerns were also expressed as to the appropriateness of using environmental impact statements, gray literature, personal communications, unpublished data, websites, and summary documents.*

ADNR Response: The finding is based upon information DO&G requested from many local, state and federal agencies, and Native corporations, including ADF&G and the NSB. Considered and discussed in the finding is information from over 30 sources describing the Beaufort Sea area; almost 120 sources describing the habitats, fish, and wildlife of the area; nearly 40 sources describing current and projected uses of the area; and about 120 sources concerning potential effects of oil and gas development. Much of the information available to, and considered and discussed by, the director was relatively current. Other information was older, unavailable, inconclusive, contradictory, from locations outside the sale area, or for species closely related to those in the sale area but not actually found there. If information was of assistance in making a determination of the state’s best interests, the information was included. When qualifiers were appropriate, they were added. When data were lacking, such was noted. Every piece of information received is not required to be utilized in making a best interest finding. The nature of the task and the applicable law confer the discretion to accept or reject the information provided. As set forth in the best interest finding, the information provided in this case is more than sufficient to make a finding as to whether Beaufort Sea oil and gas lease sales are in the best interest of the State.

AS 38.05.035(g)(1) requires consideration and discussion of facts material to issues raised during the public comment period and facts material to the statutory criteria contained in subsection (g)(1)(B)(i)-(xi). Several federal environmental impact statements were considered because they contain information material to the best interest finding. Characterization of sources of information as gray literature, personal communications, unpublished data, or websites is not an appropriate basis upon which to preclude consideration of information contained in such sources. A best interest finding requires consideration of all material information. Current material information may only be available from gray literature, personal communications, or websites. For example, information from ADF&G, such as harvest statistics and population abundance estimates, is often available in agency reports that are considered gray literature.

Personal communications are also appropriate for consideration when they contain current material information. In this case, updated abundance estimates for two caribou herds were provided in personal communications from ADF&G. This information is not only material, it is statutorily required to be considered (AS 38.05.035(g)(1)(B)).

Likewise, unpublished data or information from websites may contain material information. For example, most published estimates of Beaufort Sea subsistence harvests are over 20 years old, and in some cases several generations removed from current subsistence users. The NSB provided the most current, albeit unpublished, subsistence harvest statistics. Such subsistence estimates are required to be considered in the best interest finding. In similar fashion, the latest census data for communities in the Beaufort Sea area are primarily available from the U.S. Census Bureau's website. The size of communities in and adjacent to the lease sale area is material to the reasonably foreseeable effects and fiscal effects on such communities.

Summaries provide relevant information from experts. For example, NMFS biologists provide periodic stock assessments of marine mammals and compile information from the most recent studies to ascertain the overall health and outlook for various marine mammal populations. These summaries, available as gray literature from the NMFS website, provide critical information that is highly relevant to the best interest determination.

5. Cumulative Effects

Comment Summary: *Concerns were expressed regarding the consideration given to reasonably foreseeable cumulative effects of oil and gas activities on fish and wildlife habitat and populations.*

ADNR Response: AS 38.05.035(g) requires ADNR to consider the reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources, the reasonably foreseeable fiscal effects of the lease sale and the subsequent activity on the state and affected municipalities and communities. Chapter Eight addresses reasonably foreseeable effects of oil and gas development in the Beaufort Sea area. The Beaufort Sea lease sale, as conditioned with mitigation measures and lessee advisories, is in the best interests of the state of Alaska.

6. Subsistence/Bowhead Whales

Comment Summary: *Concerns were expressed regarding the adequacy of the consideration given to subsistence and bowhead whales.*

ADNR Response: Concerns expressed regarding the adequacy of the consideration given to subsistence and bowhead whales are unwarranted. Chapter Four, Section B4b discusses bowhead whales. Chapter Five, Section A1 contains a lengthy discussion of subsistence fishing, hunting and gathering. Chapter Eight, Sections L1 and N1 discuss potential cumulative effects on bowhead whales and subsistence. Mitigation measures and other regulatory requirements which affect subsistence are discussed in Chapter Eight, Sections L2 and N2.

7. Effectiveness of Mitigation Measures

Comment Summary: *Concerns were expressed regarding the effectiveness of mitigation measures, lack of specification as to which mitigation measures protect which resource[s], and any analysis of the effectiveness of each mitigation measure in limiting an adverse effect.*

ADNR Response: Consideration of lease stipulations and mitigation measures, including any measures to prevent and mitigate releases of oil and hazardous substances, to be included in the leases, and a discussion of the protections offered by these measures is contained in Chapter Eight. Section B discusses reasonably foreseeable cumulative effects and specifies which mitigation measures protect which resource[s]. Mitigation measures included in this finding were developed over decades of lease offerings with consultation with ADF&G and other resource agencies, and provide environmental protections beyond what is required by law. These measures balance environmental concerns, social and economic considerations, and public benefits.

Annually, DO&G requests public comments on any new information that has become available since issuance of the most recent best interest finding for that lease sale area. The information received is used to determine whether it is necessary to supplement the finding. As a result of this process, mitigation measures can be added or modified if warranted by new information.

8. Input from Local Communities and Native Organizations

Comment Summary: *Some commenters said that ADNR failed to work with, consult with, or meet with Native communities who may be impacted; that ADNR refused to coordinate and cooperate with certain agencies and NGOs; and that untapped sources of information, ideas, and proposals were not utilized. The NSB felt it should have been given cooperating agency status similar to the federal NEPA process. Some commenters said ADNR considers working with Native communities only as a hurdle, that treatment of NSB's comments was cavalier, and that only "much" of NSB's comments were included in the preliminary finding rather than including "all" of NSB's comments. Some commenters therefore requested that the preliminary finding be set aside and that ADNR meet with local communities and undertake another public process.*

ADNR Response: Obtaining input from local governments, communities, and residents is crucial for the best interest finding process. However, local concerns must be balanced with the concerns of many other stakeholders to ensure fairness and compliance with legally-mandated processes specified in AS 38.05.035, AS 38.05.945, and AS 38.05.946. The public process for best interest findings is described in detail in Chapter Two, Section D.

All stakeholders were given ample opportunity to participate in the Beaufort Sea best interest finding process. To initiate the process of gathering information on the proposed lease sales, on April 23, 2008, DO&G issued a Request for Agency Information, in which information and data about the region's property ownership status, peoples, economy, current uses, subsistence, historic and cultural resources, fish and wildlife, and other natural resource values was requested. The Request was sent to almost 50 agencies, local governments, and Native corporations (Table A.2). DO&G received responses from six: the Alaska Department of Environmental Conservation (ADEC); ADNR, Office of Habitat Management and Permitting (OHMP); ADNR, Division of Parks and Outdoor Recreation (DPOR); ConocoPhillips Alaska, Inc. (CPAI); the Alaska Fisheries Science Center; and the North Slope Borough (NSB).

Under AS 38.05.946, municipalities or corporations entitled to receive notice under AS.38.05(c) may hold a hearing. The commissioner is required to attend the hearing. The commissioner also has discretion to hold a public hearing, but is not required to do so. To ensure that local residents had ample opportunity to participate in the finding, ADNR began discussing opportunities for input and participation with the NSB in March 2006 and again in November 2008. After the preliminary best interest finding was issued, no municipalities or corporations scheduled public hearings. ADNR conducted public hearings in May 2009. Efforts were made to avoid conflicts between public meetings and subsistence whaling activities in Beaufort Sea communities, and to obtain information about meeting logistics in remote villages. ADNR attempted to contact the NSB regarding timing and logistics of public hearings as early as March 3, 2009, but met with little success until April 16, 2009, after which ADNR immediately began scheduling public hearings and making logistical arrangements.

The public comment period was from April 2, 2009 through June 1, 2009; the comment period was then extended through August 31, 2009. ADNR held public hearings in Barrow on May 11, 2009; in Nuiqsut on May 12, 2009; and in Kaktovik on May 19, 2009. A public hearing by teleconference was held for Wainwright on May 21, 2009; and an informational public meeting was held in Anchorage on May 21, 2009. Meetings were announced through a combination of statewide media releases, newspaper ads, public service announcements on local radio stations, flyers, and

announcements over local VHF radio. Attendance at the meetings ranged from four in Anchorage to 14 in Nuiqsut; no one attended the teleconference held for Wainwright (Table A.3).

All of NSB's sources, comments, and requests were carefully considered. However, after careful consideration, some were not included for a variety of reasons.

The NSB requested that ADNR convene a series of meetings among stakeholders, such as state resource agencies, the NSB, the Alaska Eskimo Whaling Commission, villages, federal agencies, conservation organizations, and industry, to discuss issues that should be addressed in the preliminary finding. All stakeholders had ample opportunity to participate in the public process. The director did not agree to NSB's request to participate as a "cooperating agency" because "cooperating agencies" are specific to the NEPA process which is a federal, not state, process (see also Section A11 response below). Alaska has its own statutory process for obtaining public input on best interest findings. ADNR is required to follow this process to ensure fairness to all stakeholders.

Input from local communities and all stakeholders is crucial, but the public process to be followed for best interest findings is a state process that is clearly defined in state statute. In following the state process, ADNR expended considerable time, expense, and effort to ensure ample opportunity for all stakeholders, including those in local communities, to participate. Therefore, it is unnecessary to set aside the preliminary finding and begin a new public process.

9. Directional Drilling

Comment Summary: *Some commenters requested a prohibition on oil and gas activities offshore which would allow shore-based directional drilling only.*

ADNR Response: Directional drilling is not typically used during the exploration phase. It is however cost effective during development. Many surface use conflicts can be avoided and there are significant savings realized in pad construction and required facilities. Some tracts are located too far offshore for shore based directional drilling and even those reservoirs that are reachable may be located or sized such that directional drilling is not feasible. Until specific sites and development projects are proposed and the specific conditions of drill sites are known, the applicability of directional drilling for oil and gas within the sale area is unknown. The mitigation measures provided in the Beaufort Sea finding, along with the many other regulatory protections in place, are adequate to protect offshore habitats, fish, and wildlife. Allowing only shore-based drilling for offshore tracts would unnecessarily restrict potential future development.

10. Tract Deferral/Deletions

Comment Summary: *Some commenters requested additional areas deferred from leasing. Others requested the deferred tracts permanently removed from the sale area, or the sale area to be decreased.*

ADNR Response: ADNR has required measures to ensure that exploration, development and production activities within the sale area are conducted in a manner that avoids, minimizes, or mitigates impacts to habitats, fish and wildlife, and subsistence. Additional tract deferrals and deletions are unnecessary.

Appendix A: Comments and Responses

Table A.2. Agencies, local governments, and Native corporations to which DO&G sent the Request for Agency Information.

Alaska Native Organizations	Cities and Boroughs	Federal Agencies	State Agencies	Other Agencies
13th Regional Corporation	North Slope Borough	Army Corps of Engineers	Department of Commerce Community & Economic Development	Natural Resource Conservation & Development Board)
Alaska Eskimo Whaling Commission	City of Anaktuvuk Pass	Bureau of Land Management	Department of Environmental Conservation	Fairbanks Soil & Water Conservation District
Alaska Federation of Natives, Inc.	City of Atkasuk	Coast Guard	Department of Fish & Game	Oil & Gas Conservation Commission
Alaska Inter-Tribal Council	City of Barrow	Department of the Interior	Department of Labor	University of Alaska
Anaktuvuk Village Council	City of Kaktovik	Environmental Protection Agency (Anchorage, Seattle)	Department of Law	Mental Health Trust
Arctic Slope Regional Corporation	City of Nuiqsut	Fish & Wildlife Service (Arctic National Wildlife Refuge, Marine Mammals Management, Subsistence Office)	Department of Natural Resources (various divisions)	
Arctic Village Council	City of Point Hope	Forest Service	Department of Revenue	
Asnaltd (Barrow)	City of Wainwright	Geological Survey, Geologic Division	Department of Transportation & Public Facilities	
Atkasuk Corporation		National Marine Fisheries Service	Joint Pipeline Office	
Barrow Whaling Captains' Association		National Oceanic & Atmospheric Administration	Office of the Governor	
Kaktovik Inupiat Corporation		National Park Service	Office of the Lt. Governor	
Kuukpik Corporation (Nuiqsut)		Minerals Management Service	Office of Management & Budget	
NANA Regional Corporation, Inc.			Alaska Board of Fisheries	
Nunamiut Corporation (Anaktuvuk Pass)				
Olgoonik Corporation (Wainwright)				
Point Hope Native Village				
Point Lay Native Village				
Tigara Corporation (Point Hope)				
Ukpeagvik Inupiat Corporation (Barrow)				
Venetie Village Council				
Village of Wainwright				

Table A.3. Attendance at five public meetings held by ADNR for the Beaufort Sea preliminary best interest finding.

Location	Attendance
Barrow	5
Nuiqsut	14
Kaktovik	9
Wainwright (teleconference)	0
Anchorage	4

11. State of Alaska Best Interest Findings Process and Federal Environmental Impact Statement Process

Comment Summary: Some commenters expressed, explicitly or implicitly, that they wanted an environmental impact statement (EIS) process for the Beaufort Sea oil and gas lease sales. Some comments implied confusion between the state’s process for best interest findings and the federal EIS process. Some commenters stated that analyses were absent, incomplete, or needed; or that certain effects needed to be quantified.

ADNR Response: The process for developing best interest findings for state oil and gas lease sales, what matters are to be included in the findings, how those matters are to be considered, and the process for obtaining public input is statutorily mandated. AS 38.05.035(e)(1)(A) and (B) describe the scope of administrative review; AS 38.05.035(e)(1)(C) allows for phased review; and AS 38.05.035(g) lists the matters that must be included in the finding. This process is described in Chapter Two of the finding.

In specifying the process for best interest findings, the legislative intent language for SB308 (Eighteenth Legislature) Section 1(7) (Ch. 38 SLA 1994) explicitly states that ADNR is not required to conduct an EIS:

Analyses comparable to those generally required by 42 USC 4321-4370a (National Environmental Policy Act of 1969, as amended) for the preparation of an environmental impact statement under 42 USC 4332(2)(C) are not required by the state for support of best interest findings issued under AS 38.05 or conclusive coastal zone consistency determinations issued under AS 46.40.

An EIS process is not required. The Beaufort Sea preliminary finding and final finding comports with the requirements of AS 38.05.035(g).

12. Need for Additional Studies

Comment Summary: Some commenters expressed that the state should conduct baseline studies, gap analyses, or risk studies to obtain more information before proceeding with oil and gas lease sales.

ADNR Response: The statutes for best interest findings require consideration and discussion of “...facts that are known to the director...and within the scope of the administrative review...” (AS 38.05.035(g)(1)). This requirement has been met.

13. Alaska Coastal Management Program

Comment Summary: *Some commenters said that ADNDR should delay the sale until the North Slope Borough has an approved coastal district plan in effect and that ADNDR impermissibly phased its consistency review of the ACMP state standards.*

ADNR Response: It would not be in the state's best interest to delay the sale until the North Slope Borough has an approved plan because it is unknown when a plan will be approved. (The North Slope Borough coastal district submitted the Final Plan Amendment of its Coastal Management Plan on April 12, 2007 per 11 AAC 114.345(g)). Future activities must comply with the ACMP and any applicable local coastal district plans in effect. A new coastal management consistency review may be conducted if the commissioner determines that new information or conditions suggest Beaufort Sea Areawide lease sales may no longer be consistent with ACMP statewide standards.

AS 46.40.0949(a) allows phasing of consistency reviews for a use or activity if

- (1) at the time the proposed use or activity is initiated, there is insufficient information to evaluate and render a consistency determination of the entirety of the proposed use or activity;
- (2) the proposed use or activity is capable of proceeding in discrete phases based upon developing information that was not available to the project applicant at the time of the previous phase; and
- (3) each subsequent phase of the proposed use or activity is subject to discretion to implement alternative decisions based upon the developing information.

At the time of lease issuance, it is impossible to reasonably foresee specific exploration or development projects or the effects of those projects. Each phase of oil and gas activity builds on the previous phase. Depending on the information gathered at the exploration phase, development may or may not take place. Before development may occur, exploration must show and confirm, through drilling a well, not only the existence of oil and/or gas but that the oil/gas exists in economically producible quantities. Therefore, at the initial disposal stage, there is insufficient information to render a consistency determination for the future exploration and development/ production phases. At each phase, proposed site specific and project specific activities will be analyzed for consistency based on developing information gathered at the previous phase. Further, each of these subsequent phases, exploration and development/production, is subject to alternative decisions on how, or when best to proceed with a project based upon this developing information. The disposal of state lands in the Beaufort Sea Areawide oil and gas lease sale meet the provisions of AS 46.40.0949(a), therefore phasing is allowed for the ACMP consistency review.

14. Public Access

Comment Summary: *Some commenters stated that oil and gas activities were hindering public access to coastlines for recreation and subsistence activities.*

ADNR Response: Mitigation measures A1a, A3b, and A5b address public access. Plans of operation must describe lessees' efforts to minimize impacts on subsistence use areas. Traditional and customary access to subsistence areas shall be maintained unless reasonable alternative access is provided to subsistence users. Public access to, or use of, the lease area may not be restricted except within the immediate vicinity of drill sites, buildings, and other related facilities. Areas of restricted access must be identified in the plan of operations. Lease facilities and operations shall not be located so as to block access to or along navigable or public waters.

B. Summaries of Written Comments

Section B provides summaries of specific comments submitted in writing by individuals and organizations, and ADNR's response. Only written comments that were submitted separately from oral testimony, or that presented issues or concerns that were significantly different from oral testimony, are summarized below.

1. Trustees for Alaska

(Representing Alaska Wilderness League, Rosemary Ahtuanguak, Center for Biological Diversity, Defenders of Wildlife, Gwich'in Steering Committee, Native Village of Point Hope, Natural Resources Defense Council, Northern Alaska Environmental Center, Pacific Environment, Resisting Environmental Destruction on Indigenous Lands [REDOIL], Sierra Club, and The Wilderness Society)

Location: Anchorage

a. Phasing

Comment Summary: *That phasing is applied inappropriately to the lease sale phase; that there are concerns about the constitutionality of phasing; that there is insufficient review at later phases; and that ADNR should conduct a best interest finding process for all post-lease phases.*

ADNR Response: See response to Issue 3.

b. Definition of "significant"

Comment Summary: *That ADNR uses and unsubstantiated and flawed definition of "significant" to establish the scope of review. That as defined by DNR, a "reasonably foreseeable effect" is "significant" only if it is "a known and noticeable impact on or within a reasonable proximity to the area involved in the disposal." That missing from this definition is what DNR means by a "known" and "noticeable" impact or what constitutes "reasonable proximity" to the sale area. Without definitions of these terms, it is impossible to know what DNR has excluded from its analysis.*

ADNR Response: The purpose of the term "significant" in Chapter Two, Section F is to assist interested parties with understanding the concept of reasonably foreseeable effects. This text represents an ongoing working explanation that has been used in various ADNR documents to provide examples of the types of effects that are discussed in best interest findings. The common definition of the term significant is the meaning intended: "having or likely to have influence or effect: important", "of a noticeably or measurably large amount" (Merriam-Webster 2008).

c. Oil spills

Comment Summary: *That the Preliminary Finding fails to adequately analyze the difficulty of containing and cleaning up oil spills and does not offer any new measures that will mitigate the risks of oil spills.*

ADNR Response: See response to Issue 1.

d. Greenhouse gas emissions and global warming

Comment Summary: *That the Preliminary Finding fails to adequately address greenhouse gas emissions and the impact of global warming on the arctic, and information from the Alaska Greenhouse Gas Inventory and Reference Case Projections should be included.*

ADNR Response: See Response to Issue 2. Information from the document referenced by Trustees (Roe et al. 2007) was included in the Preliminary Finding (and retained in the Final Finding) in Chapter Eight, Section A1.

e. Impact on ANWR, Essential Fish Habitat, and species and subsistence in ANWR

Comment Summary: *That the Preliminary Finding fails to adequately consider reasonably foreseeable cumulative effects of oil and gas activities on fish and wildlife habitat and populations, and subsistence, specifically, impacts to the Arctic National Wildlife Refuge, Essential Fish Habitat, polar bears, bowhead whales, Pacific walrus, seals, and birds.*

ADNR Response: The finding considers and discusses the reasonably foreseeable cumulative effects of oil and gas activities on fish and wildlife habitat and populations, and subsistence in Chapter Eight. The finding considers and discusses effects on fish, birds, caribou, muskoxen, brown bear, polar bear, furbearers, and pinnipeds. AS 38.05.035(g) specifies what must be considered and discussed in best interest findings, and AS 38.05.035(g)(vi) states that “the reasonably foreseeable cumulative effects of *exploration, development, production, and transportation* for oil and gas or for gas only *on the sale area*, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources” must be considered and discussed (emphasis added). This statute specifies that the area to be considered is the sale area; areas outside the sale area are not required to be considered and discussed concerning cumulative effects on subsistence, fish and wildlife habitat and populations and their uses, and historic and cultural resources.

A brief discussion of Essential Fish Habitat (EFH) was added to the Final Finding in Chapter Four, Section A3. However, EFH is a federal designation that is considered by federal agencies during the review process of federal projects. Chapter Nine, Section B7e was added to the final finding, notifying potential lessees that their activities may be subject to federal consultation concerning EFH.

A status change for yellow-billed loon that occurred just as the Preliminary Finding was being issued was added to the Final Finding.

f. Oil transportation

Comment Summary: *That the Preliminary Finding fails to adequately analyze how oil will be transported from the sale area. To date, the Northstar oil field has the longest subsea buried pipeline in the Beaufort Sea and it is only six miles long. That there is no evidence or analysis to indicate that a subsea pipeline could transport oil from the far reaches of the sale area adjacent to the Arctic Refuge, more than 100 miles, to the nearest available onshore location.*

ADNR Response: Under AS 38.05.035(g) the director is required to consider and discuss the method or methods most likely to be used to transport oil or gas from the lease sale area and the advantages, disadvantages, and relative risks of each. This was done in Chapter Six, Section E. The Northstar pipeline demonstrates that subsea pipelines can be built in the arctic. Whether a pipeline from other locations in the sale area will be economically feasible cannot not be known until the area is explored, discoveries are made, and the size of the hydrocarbon deposits are delineated.

g. Effectiveness of mitigation measures

Comment Summary: *That ADNR failed to analyze the effectiveness of mitigation measures or specify which mitigation measures protect which resource[s], and failed to provide an analysis of the effectiveness of each mitigation measure in limiting an adverse impact.*

ADNR Response: Under AS 38.05.035(g) the director is required to consider and discuss the lease stipulations and mitigation measures, including any measures to prevent and mitigate releases of oil and hazardous substances, to be included in the leases, and a discussion of the protections offered by these measures. However, the director is not required to prove or disprove effects. Rather, the director is required to “consider and discuss...facts that are known to the director...and within the scope of the administrative review...” (AS 38.05.035(g)(1)). Mitigation measures are presented in Chapter Nine. The protections offered by these measures are discussed in Chapter Eight, Sections A-O.

2. Crag Law Center

(Representing Inupiat Community of the Arctic Slope [ICAS] and the Alaska Eskimo Whaling Commission [AEWC]).

Location: Portland, OR

a. Input from local communities and organizations

Comment Summary: *That ADNR failed to consult and meet with local communities, the Alaska Eskimo Whaling Commission (AEWC) and the Inupiat Community of the Arctic Slope (ICAS) in the process leading up to release of the Preliminary Finding.*

ADNR Response: See response to Issue 8.

b. Impacts to subsistence

Comment Summary: *That impacts to subsistence use in the Beaufort Sea were not adequately analyzed. For example, the National Academy of Sciences' report - Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope that was published in 2003 was not incorporated into ADNR's findings.*

ADNR Response: Subsistence use was discussed in Chapter Five, Section A. The reasonably foreseeable cumulative effects of the sale on subsistence use was discussed in Chapter Eight, Section N. The report “Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope” was cited in Chapters Six and Eight.

c. Deferrals

Comment Summary: *That the mitigation measures will not protect subsistence use. ADNR needs to create large deferral areas in order to prevent deflection of whales from their migration routes. The lands east of Badami should be deferred from the lease sale.*

ADNR Response: Comprehensive mitigation measures designed to protect subsistence uses in the lease sale area are included in the finding. These measures protect subsistence whaling and other harvest activities, and access to subsistence areas. Large deferral areas are included, as well as stringent seasonal restrictions to protect subsistence whaling. Additional deferral areas are unnecessary.

d. Baseline data and studies

Comment Summary: *That baseline data and studies are necessary for assessing the status of bowhead whales in the Beaufort Sea before any additional activities are authorized that might adversely impact the whales.*

ADNR Response: The director is not required to conduct studies to obtain new or complete information, nor is the director required to wait until additional research or studies are conducted to make a finding of whether oil and gas lease sales are in the best interest of the state. Rather, the director is required to “consider and discuss...facts that are known to the director...and within the scope of the administrative review...” (AS 38.05.035(g)(1)). Sufficient information was available to determine that Beaufort Sea Areawide lease sales are in the state’s best interest.

e. Oil spill cleanup and impacts

Comment Summary: *That ADNR failed to analyze the reasonably foreseeable and significant impacts that would result from an oil spill in broken ice conditions.*

ADNR Response: See response to Issue 1.

f. Effects on ANWR

Comment Summary: *That ADNR has failed to discuss the sale’s effect on ANWR which will foreclose the construction of on-shore infrastructure forcing the use of more risky offshore techniques during oil and gas activities.*

AS 38.05.035(g) specifies what must be considered and discussed in best interest findings, and AS 38.05.035(g)(vi) states that “the reasonably foreseeable cumulative effects of ***exploration, development, production, and transportation*** for oil and gas or for gas only ***on the sale area***, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources” must be considered and discussed (emphasis added). This statute specifies that the area to be considered is the sale area; areas outside the sale area are not required to be considered and discussed concerning cumulative effects on subsistence, fish and wildlife habitat and populations and their uses, and historic and cultural resources. Likely methods of oil and gas transportation are discussed in Chapter Six, Section E.

3. North Slope Borough

Location: Barrow

a. North Slope Borough’s position

Comment Summary: *That the borough opposes offshore leasing, except where development is required to take place from onshore drilling locations. If leasing does continue, they requested additional, larger areas of tract deferrals to protect critical resource and subsistence areas, specifically “areas of influence”. That “areas of influence” include areas with industrial activity that has the potential to deflect migrating whales and other resources beyond the safe reach of subsistence users, and that industrial activities have been shown to impact harvest success by deflecting the migration or making whales more skittish and difficult to approach.*

ADNR Response: See Issue A9 and A10 responses. Mitigation measures detailed in Chapter Nine, Section A3, and other regulatory requirements, provide a myriad of protections for subsistence

whaling. Subsistence bowhead whale harvests have remained stable for many years (see Table 5.9), and subsistence hunting for bowhead whales is adequately protected.

b. Inter-governmental consultation

Comment Summary: *That treatment of the borough, compared with the North Aleutian Basin, has been unfair, as evidenced by a letter from Governor Palin concerning the MMS OCS leasing program. That the NSB had requested that for the current best interest finding process, DO&G grant the NSB status similar to the “cooperating agency status” of the federal NEPA process.*

ADNR Response: See Issue A8 response.

c. Use of data and sources

Comment Summary: *That the preliminary finding was not adequately updated with the most current scientific information; that sources provided by the NSB in response to the request for agency information were not used; that summary documents, and federal environmental assessments and environmental impact statements were used inappropriately; and that it is inappropriate to use gray literature, personal communications, and websites in the finding.*

ADNR Response: See Issue A4 response.

d. Climate change

Comment Summary: *That the finding should include more discussion of climate change, and that reports generated or provided to the Governor’s Climate Change Sub-cabinet and the Legislature’s Alaska Climate Change Commission should be used. NSB described effects of climate change that have been observed by local residents. NSB listed concerns about climate change such as opening of a northern sea route and increased vessel traffic, and potential resulting restrictions to whale harvest quotas that the IWC might implement to protect whales. That the effects of climate change on risks associated with oil and gas exploration and development should be addressed, and that predicting and analyzing effects of oil and gas development is impossible because effects of climate change are unpredictable.*

ADNR Response: See Issue A2 response.

e. Public health

Comment Summary: *That discussion of public health in the preliminary finding is inadequate, that the section should be rewritten in collaboration with state, borough, and tribal health authorities, and that mitigation measures addressing health should be adopted. The NSB also provided an attachment discussing the relationship between subsistence and health.*

ADNR Response: Public health is discussed in Chapter Eight, Section Q2. Research suggests that social pathology and other health problems may be related to the rapid cultural changes that have occurred in rural Alaska. However, attributing these changes to specific causes, such as oil and gas development, is difficult because many health and social changes have occurred in throughout rural Alaska, whether or not they are exposed to oil and gas development. The scope of review for best interest findings is limited to effects of oil and gas development in the Beaufort Sea area. At this time, information is unavailable concerning effects of oil and gas development in the Beaufort Sea area on public health. However, the state is currently developing a policy regarding Health Impact Assessments (HIA) for large resource extraction projects. HIA is a tool that seeks to identify potential lasting or significant changes, both positive and negative, of different actions on the health

and social well-being of a defined population as a result of a program, project, or policy. Related processes are underway by the Alaska Inter-Tribal Council and the NSB.

Each year, under AS 38.05.035(e)(6)(F), ADNR issues a call for comments requesting substantial new information that has become available since the most recent finding for that sale area was written. Based on information received, ADNR will determine whether it is necessary to supplement the finding. By this mechanism, ADNR will have the opportunity to consider health impacts once the Alaska Inter-Tribal Council and NSB complete their HIAs and the state finalizes its HIA policy.

f. Use of Arctic Offshore Oil and Gas Guidelines

Comment Summary: *NSB provided a summary of the April 29, 2009 update of the Arctic Council's "Arctic Offshore Oil and Gas Guidelines" and requested that the guidelines be incorporated into the finding.*

ADNR Response: Mitigation measures and other regulatory protections in the Beaufort Sea finding address many of the goals of these guidelines.

g. cANIMIDA Project

Comment Summary: *That the finding must analyze and address conclusions of the cANIMIDA final report, which were published in March 2009.*

ADNR Response: The Arctic Nearshore Impact Monitoring in Development Area (ANIMIDA) was a federal MMS five-year study started in 1999 that provided baseline data and monitoring of chemical contamination, turbidity, and subsistence whaling near Northstar and Liberty development sites. cANIMIDA is a continuation of that study. The director is not required to analyze and address the cANIMIDA report. However, the director considered and discussed some relevant information from this study in the preliminary finding, such as subsistence (Galginaitis 2008). The final report for cANIMIDA tasks 3 and 4, concerning metal contaminants, was published in March 2009 just as the preliminary Beaufort Sea finding was being issued. Results from the final report concluded that concentrations of suspended sediments and dissolved and particulate metals were at background levels, were well below EPA water quality criteria, and were not influenced by anthropogenic inputs, with the possible exception of Pb. This information has been added to Chapter Eight, Section B1 of the final finding. In addition, information found in the report about flows in the Kuparuk and Sagavanirktok rivers were added to Chapter Four, Section A2a.

h. Editorial comments

Comment Summary: *NSB provided 10 pages of editorial comments on Chapters 2-6 of the preliminary finding. These included comments, corrections, and additional information sources to specific text in the preliminary finding concerning climate and climate change, oceanography, plants, birds, caribou, moose, muskoxen, Arctic fox, walrus, polar bears, bowhead whales, beluga whales, seals, other marine mammals, harvest, and tourism. The NSB requested that the state complete an independent spill risk analysis, and asked that additional information on specific oil spills be included.*

ADNR Response: Many of NSB's suggestions were incorporated into the final finding. For example, more recent sources on climate were added to Chapter Three, Section E. In Chapter Four, additional rivers were added to the discussion of important bird habitats; updated information about yellow-billed loon status was added; current information about moose abundance was added; and additional sources were added to the bowhead whale section. Other changes requested or suggested by the NSB were not made for a variety of reasons. For example, some of NSB's statements

contradicted published sources, and the NSB did not provide published sources to support their statements. Some of the sources referenced by the NSB were studies that focused on life history details that were unnecessary for a best interest finding; and some of the NSB's comments were alternative interpretations of sources or studies cited in the finding. See also Issue A4 response concerning information, data, and studies used in the finding; Issue A1 concerning oil spills; and Issue A11 concerning the state's best interest finding process compared to the federal EIS process.

i. Reasonably foreseeable effects of leasing (Chapter Eight)

Comment Summary: *That oil and gas activities and other human activities beyond the Beaufort Sea, other human activities within the Beaufort Sea area, and other influences on resources and uses must be evaluated. That some listings of activities and effects are incomplete or should be expanded. That an impacts analysis is lacking and should be added, and that an analysis of the effectiveness of each mitigation measure in limiting an adverse impact is required.*

That the water quality section should be expanded and that additional potential effects should be discussed concerning discharge. That the NSB has concerns about the 2007 Arctic General Permit that have not been addressed.

The NSB included seven pages of additional comments and corrections to specific text in the preliminary finding, and additional information sources, concerning seismic surveys, discharges, and effects on fish, caribou, polar bears, whales, other marine mammals, and subsistence.

ADNR Response: AS 38.05.035(g) specifies what must be considered and discussed in best interest findings, and AS 38.05.035(g)(vi) states that “the reasonably foreseeable cumulative effects of **exploration, development, production, and transportation** for oil and gas or for gas only **on the sale area**, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources” must be considered and discussed (emphasis added). This statute specifies that the area to be considered is the sale area; areas outside the sale area are not required to be considered and discussed concerning cumulative effects on subsistence, fish and wildlife habitat and populations and their uses, and historic and cultural resources. Effects of activities other than exploration, development, production, and transportation for oil and gas or for gas only are not required to be considered and discussed. See also Issue A11 response.

Until leases are sold and discoveries are made, DO&G cannot predict whether and when any oil and gas activity might occur, or the type, location, duration, or level of those potential activities. In addition, methods to explore for, develop, produce, and transport petroleum resources will vary depending on the area, lessee, operator, and discovery. Best interest findings are not required to speculate about such possible future effects (AS 38.05.035). Therefore, effects discussed in Chapter Eight, Sections A-O are not intended to be an exhaustive list of potential effects, but rather a general discussion of reasonably foreseeable cumulative effects. See Issues A5 and A7 responses concerning cumulative effects and effectiveness of mitigation measures.

Chapter Eight, Section B includes over three pages of discussion and consideration of potential effects on water quality and mitigation measures to address potential negative effects, and discussion of the protections offered by the mitigation measures. Multiple references are cited. Potential activities, contaminants, and sources of contaminants are discussed. As explained above, this discussion is not intended, or required, to provide an exhaustive list of every possible activity, contaminant, source of contaminant, and potential effect to water quality. Rather, it provides a discussion, in general, of reasonably foreseeable cumulative effects on water quality, and provides the director with sufficient information to make a decision of whether or not oil and gas lease sales are in the best interest of the state.

Wastewater or NPDES (National Pollutant Discharge Elimination System) permits regulate wastewater discharges into waters of the United States pursuant to the federal Clean Water Act. The 2007 Arctic General Permit is a federal permit issued by the Environmental Protection Agency. It is a general permit for oil and gas exploration activities. The permit limits the types and amounts of pollutants that can be discharged in the Beaufort Sea, Chukchi Sea, Hope Basin and Northern Norton Basin. The 2007 Arctic General Permit is a federal permit and disagreements the NSB has with EPA concerning the permit are beyond the scope of review of the state's Beaufort Sea best interest finding.

Many of NSB's editorial suggestions were incorporated into the final finding. For example, information specific to air quality monitoring in Nuiqsut was added; information about effects to marine fishes was added; a reference to a study about bird collisions with manmade structures was added; and several sources concerning whales were added to Chapter Four. Other NSB requests for Chapter Eight were not included, particularly some that conflicted with the information, sources, or data used in the finding (see Issue A4 response).

j. Mitigation measures

Comment Summary: *That the exception clause for mitigation measures is too liberal, and that exceptions should be granted only if compliance is not practicable and the lessee will undertake an equal or better alternative to satisfy the intent of the mitigation measure.*

NSB requested mitigation measures, or changes to mitigation measures, addressing plans of operations; gravel islands; design and construction of pipelines to facilitate wildlife passage; prohibition on tankers; design and construction to address hazards; continuous-fill causeways; and tracts with restrictions for breeding birds.

NSB requested changes to the subsistence mitigation measures, including adding a definition of "reasonable effort" and "unreasonable interference"; consultation process with subsistence communities; changes to Subsistence Whaling Zone dates; and activities in broken ice.

NSB requested that mitigation measures restricting seismic surveys and requiring marine mammal monitoring be added; and that measures similar to those of Mitigation Measure A3c be added for Barrow.

NSB requested that Mitigation Measure A7c also address health and safety concerns of local communities.

ADNR Response: Making the change requested by NSB to the exception clause would unnecessarily limit the director's discretion to address or balance unforeseen issues. Exceptions are not granted without careful consideration and are not granted to circumvent environmental and subsistence safeguards.

Mitigation Measure A1a was modified to specify that in plans of operations, lessees must describe their "plans", rather than "efforts", to minimize impacts. The exception for gravel islands was removed from Mitigation Measure A1c. Mitigation Measure A1g was modified to state that design and construction would "minimize", rather than "avoid" significant alteration of movement and migration patterns. Measure A1i was not changed, in order to retain discretion to use the most environmentally preferable methods for transportation. Coastal erosion and permafrost thawing were added to Mitigation Measure A1h. A prohibition of continuous-fill causeways was added to Mitigation Measure A1k. Tracts 521-526 were added to Mitigation Measure A2f.

Definitions of "reasonable" and "unreasonable" were not added to Mitigation Measure A3a(i) because application of this measure will vary depending on the specifics of the situation. The

ordinary usage of reasonable (“not extreme or excessive; moderate, fair”) and unreasonable (“exceeding the bounds of reason or moderation”) are intended.

Bowhead whale migration dates for the three Subsistence Whaling Zones of Mitigation Measure A3d(ii) were not changed. The NSB did not provide supporting information for the requested changes, and ADNR could not independently find any information supporting the date changes.

Mitigation Measure A3d(iii) was not changed. Existing requirement of this mitigation measure for lessees to be trained and qualified according to Minerals Management Services standards is already stringent, and combined with regulatory requirements of DEC and AOGCC, provides adequate protections for exploratory drilling in broken ice.

Seismic surveys are regulated separately from best interest findings, and are therefore not addressed specifically in the mitigation measures. The consultation process specified in Mitigation Measure A3a provides a reasonable process for consultation with subsistence users. Mitigation measures requiring marine mammal monitoring were not added because marine mammal monitoring is already required through various regulatory protections administered by NMFS under the Marine Mammal Protection Act and the Endangered Species Act. Measures specific to Barrow, similar to those of A3c concerning siting of permanent facilities, were not added because existing tract deferrals preclude siting of facilities in the Barrow area.

Health and safety were added to Mitigation Measure A7c.

k. Air quality

Comment Summary: *In Attachment 2 of its comments on the preliminary finding, the the NSB stated that the finding should include a comprehensive quantitative assessment of the reasonably foreseeable cumulative impacts of the proposed lease sale activities on the environment and public health. They stated that the state must ensure that cumulative impacts of activities associated with the lease sale will not prevent compliance with the National Ambient Air Quality Standards (NAAQS); and that the finding should include mitigation measures that prevent significant deterioration of air quality and ensure compliance with the NAAQS.*

ADNR Response: See Issue A5 response concerning cumulative effects, and Issue A11 response concerning environmental impact statements and quantitative analyses. Quantitative analyses such as those required by the EIS process are not required for best interest findings. The air quality program that ensures federal NAAQS are met is administered by ADEC. Oil and gas exploration, development, production, and transportation must meet the federal NAAQS, regardless of mitigation measures in the best interest finding.

Mitigation measures are conditions or limitations, in addition to those imposed by statute. Where existing statutes offer sufficient protections additional mitigation measures are not necessary. Although oil and gas activities subsequent to leasing could potentially affect air quality, federal and state air quality regulations, particularly the Clean Air Act (42 USC §§7401-7661), 18 AAC 50, and AS 46.14, are expected to avoid, minimize, and mitigate those potential effects. Therefore, additional mitigation measures are not included.

4. Alaska Oil and Gas Association (Marilyn Crockett)

Location: Anchorage

a. General comments

Comment Summary: AOGA stated that it supports the finding that Beaufort Sea oil and gas lease sales will be in the best interest of the state.

ADNR Response: Comment noted.

b. Mitigation measures

Comment Summary: AOGA requested specific wording changes to Mitigation Measures 1(d), 4(b), and 4(g); and Lessee Advisory 4(a).

ADNR Response: Mitigation Measure A1d was changed from "...all activities within wetlands..." to "...certain activities within wetlands...". The word "aggregate" was dropped from Mitigation Measure A4b. This measure is intended to provide additional protections to water bodies and surface drinking water sources. Mitigation Measures A4g was not changed because aquifers could be encountered in the lease sale area. Lessee Advisory B4a was not changed because lessee advisories notify lessees of regulatory requirements of other agencies.

5. Alaska Department of Fish and Game (Jack Winters)

Location: Fairbanks

Comment Summary: ADF&G provided updated (2008) estimates for the Central Arctic caribou herd and the Teshekpuk caribou herd.

ADNR Response: The updated estimates were added to the final finding.

6. Nannie Rae Kaigelak

Location: Nuiqsut

Comment Summary: Ms. Kaigelak stated that she is concerned about Cross Island and Camden Bay, and that she is opposed to offshore drilling around Cross Island during whaling.

ADNR Response: See Issue A6 and Issue A10 responses.

7. Jennifer Smith

Location: Kaktovik

Comment Summary: Ms. Smith stated that she is opposed to oil and gas development in the eastern Beaufort Sea. Ms. Smith stated that the area is important to polar bears, particularly the area that spans about a hundred miles of coastal and offshore habitat from the Canadian border to Point Thompson; that it is an important denning area and feeding grounds; that pollution and disruption could occur and could affect bowhead migrations, and the quality and availability of resources for humans and polar bears; and that the lack of technology for responding to oil spills in icy waters presents an imprudent risk. She requested that the hundred-mile section be set aside and protected as a polar bear sanctuary.

ADNR Response: Chapter Four, Section B4a discusses polar bears and current information about their life history, population requirements and status, and protections. Chapter Five, Section A(1)(f)(i) discusses subsistence harvests of polar bears. Chapter Six, Section (E)(1)(a)(i) discusses subsea pipelines and ice conditions. Chapter Six, Section (F)(3)(b) discusses leak detection in icy waters; and Chapter Six, Section (F)(4)(d)(v) discusses research and development of oil spill cleanup in icy conditions. Chapter Six, Section (F)(5) discusses issues with cleanup in icy conditions, and requirements of cleanup response plans to address those conditions.

Deferrals included in the final finding; mitigation measures in the final finding that address fish, wildlife, and habitats; and other regulatory requirements adequately protect polar bears in the Beaufort Sea lease sale area.

8. Peter McKay

Location: Kenai

Comment Summary: *Mr. McKay stated that he has two major concerns with the Beaufort Sea Areawide oil and gas lease sales: 1) that provisions for dismantlement, removal, and remediation (DR&R) in the preliminary finding and lease sale documents are inadequate; and 2) that bonding requirements to ensure that funds are available to pay for DR&R are inadequate. Mr. McKay provided excerpts from a Congressional report by the General Accounting Office concerning DR&R on the North Slope (GAO 2002). Mr. McKay stated that he agrees with the two primary recommendations from the report: 1) that specific dismantlement, removal, and restoration requirements should be issued; and 2) that the availability of funds to achieve overall restoration goals should be assured.*

Mr. McKay commented that currently, the DO&G director is given too much responsibility for determining what needs to be done to satisfy Alaska DR&R requirements; that DR&R rules and conditions need to be established through a public process and adopted into Alaska statutes before leases are sold and issued; and that the current DR&R policy will probably result in protracted and expensive litigation. He stated that the state does not have adequate provisions to prevent lease holders from surrendering their leases without providing adequate DR&R, and that the state will have to incur the costs of DR&R for those sites. Mr. McKay also stated that expenses for DR&R should not be allowed to be deferred until all production on a lease ceases, but rather, that oilfield infrastructure should be required to be removed as it ceases to be used.

Mr. McKay provided specific examples from the preliminary finding, including the governmental powers section, mitigation measures, and sample lease that he stated should be strengthened or rewritten; and that all discussion and requirements concerning DR&R should be provided in one place in the document.

Mr. McKay requested: 1) that the state initiate a public process to develop clearly defined DR&R requirements that are written into the Beaufort Sea finding and future lease contracts; 2) that the state implement revised DR&R requirements to ensure that infrastructure such as wells, pipes, and gravel pads are removed as they are no longer used, and that DR&R be an ongoing process with lease holders cleaning up as they go; and 3) that the state increase bonding requirements to ensure DR&R compliance.

ADNR Response: Several regulations and mitigation measures address these issues. Dismantlement, removal, and remediation is addressed in state regulations concerning plans of operation (11 AAC 83.158(d)(3)). A plan of operation must be approved by DO&G before any operations may be undertaken on or in the leased area. An application for approval of a plan of

operations must include “plans for the rehabilitation of the affected leased or licensed area after completion of operations or phases of those operations”. This regulation gives DO&G the ability to require, review, approve, and monitor plans for DR&R at the outset of oil and gas operations.

11 AAC 82.605 addresses transferring of oil and gas interests. This regulation states, “No transfer of an interest in a lease, oil and gas exploration license, or permit, including assignments of working or royalty interest, operating agreements, and subleases, is binding upon the state unless approved by the commissioner. The transferor is liable for all obligations under the lease or oil and gas exploration license accruing before the approval of the transfer.”

Finally, mitigation measure A(1)(l) states, “Upon abandonment of material sites, drilling sites, roads, buildings, or other facilities, such facilities must be removed and the site rehabilitated to the satisfaction of the director, unless the director, in consultation with DMLW, ADF&G, ADEC, NSB, and any non-state surface owner, determines that such removal and rehabilitation is not in the state’s interest.” This measure gives the director the discretion to allow improvements to remain after abandonment, for example in cases where local residents would benefit from roads, buildings, or other improvements resulting from oil and gas development or production activities.

As the state’s oil and gas fields are maturing, the division is in the process of analyzing these and other regulatory mechanisms to determine if they adequately address issues such as the state’s level of risk and others raised by Mr. McKay. This work is in progress and will address these issues statewide, and therefore is beyond the scope of review of this best interest finding.

9. USFWS (Geoffrey L. Haskett, Regional Director)

Location: Anchorage

Comment Summary: *USFWS stated that it is concerned that ADNR did not identify and address potential land ownership and title issues with the majority of lease tracts bordering the Arctic National Wildlife Refuge (ANWR); that it is concerned that there is a high probability of resultant issues similar to those of the Point Thompson Unit (ADL 372256 from state lease sale 55); and that it is concerned that tracts the state cannot legally lease may share a boundary with ANWR. USFWS requested that ADNR remove or defer from lease sales all tracts for which ADNR is not able to verify title prior to the lease sale. USFWS also stated that tract maps provided in the preliminary finding are not sufficiently detailed or of high enough quality to determine whether tracts that share a boundary with ANWR accurately reflect the coast boundary of ANWR; and requested more detailed tract maps.*

USFWS suggested that 1) ADNR remove or postpone the lease sales of tracts that border ANWR; and 2) that ADNR and USFWS renew the effort to establish an administrative boundary that can be incorporated into a supplemental agreement to the No. 84 Original final court decree between the United States and Alaska.

ADNR Response: Chapter Two, Section H of the finding explains that it is possible that a tract included in a lease sale may contain land that the state cannot legally lease because it is subject to an existing oil and gas lease or because the mineral estate is not state owned. The extent of the state’s ownership interest in tracts in a lease sale will not be determined before the lease sale. This is because the lease sale area encompasses an immense area, covering about 2 million acres and 573 tracts. Prior to a lease sale, it is inefficient and impractical to conduct a title search of the entire area, or even just tracts bordering ANWR, because it is unknown which, if any, tracts will receive bids. Instead, ADNR will verify title for tracts receiving bids following each lease sale, and prior to issuing leases. The Beaufort Sea Areawide lease sale contains tracts in which the state owns both the

land estate and the mineral estate; and tracts where the state owns just the mineral estate, while the land estate might be either privately owned or owned by a municipality. Only those free and unencumbered state-owned oil and gas mineral estates within the tracts will be included in any lease issued. Therefore, removing or deferring tracts from the lease sale area is unnecessary.

Renewal of efforts between ADNR and USFWS concerning an administrative boundary are beyond the scope of this best interest finding, but ADNR welcomes discussion of a joint effort to consider clarification of some of these issues, such as a study to conform to survey the coastal boundary, and others.

High resolution tract maps are available on the DO&G website at <http://www.dog.dnr.state.ak.us/oil/programs/leasing/leasesales/leasesales.htm> prior to each sale.

C. References

Galginaitis, M.

2008 Annual assessment of subsistence bowhead whaling near Cross Island, 2006: cANIMIDA task 7 annual report. Minerals Management Service, Alaska Outer Continental Shelf. http://www.mms.gov/alaska/reports/2006rpts/annual_assessmt/2006%20CI%20Final%20Annual%20Report.pdf

GAO (U.S. Government Accountability Office)

2002 Alaska's North Slope: Requirements for restoring lands after oil production ceases. GAO-02-357, Report to Congressional Requesters. <http://www.gao.gov/new.items/d02357.pdf>

Merriam-Webster

2008 Merriam-Webster online dictionary. <http://www.merriam-webster.com/dictionary> Accessed January 8, 2008.

Roe, S., R. Strait, A. Bailie, H. Lindquist and A. Jamison

2007 Alaska greenhouse gas inventory and reference case projections, 1990-2020. Prepared by the Center for Climate Strategies for the Alaska Department of Environmental Conservation. <http://www.dec.state.ak.us/air/doc/AK-GHG-EI-2007.pdf>

