U.S. Department of the Interior
Bureau of Land Management

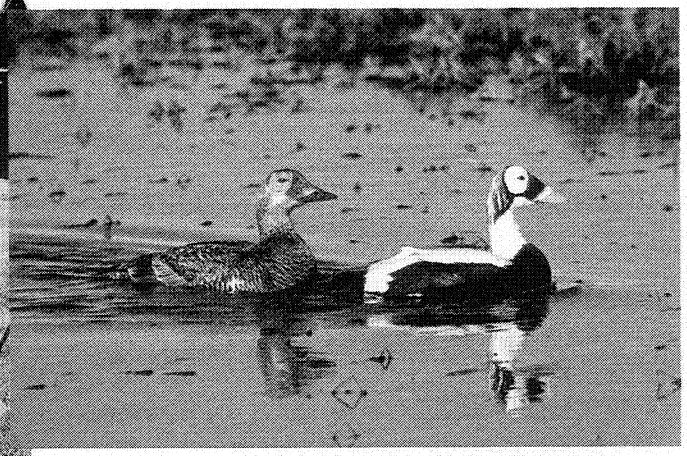
in cooperation with the
U.S. Department of the Interior
Minerals Management Service

October 1998

Northeast National Petroleum Reserve-Alaska

Integrated Activity Plan/ Environmental Impact Statement

Record of Decision



Northeast
National Petroleum Reserve-Alaska

Integrated Activity Plan/
Environmental Impact Statement

Record of Decision

10/7/98

Bruce Babbitt
Secretary of the Interior

Date

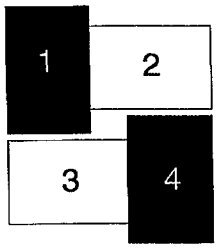
October 1998

Prepared by
U S Department of the Interior
Bureau of Land Management

In cooperation with
U.S. Department of the Interior
Minerals Management Service

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations

BLM/AK/PL-99/001+3130+930



Cover photos:

1 Anne Morkill, Bureau of Land Management
Photo of Dora Itta of Barrow
2 © D Roby & K Brink / VIREO
Photo of Spectacled Eider
3 © BP Exploration (Alaska) Inc
Photo of Exploratory Drill Rig
4 U S Fish & Wildlife Service
Photo of Caribou

Contents

Summary v

Decision 1

Alternatives Considered 9

Management Considerations 13

ANILCA Section 810 Summary 17

Mitigation and Monitoring 21

Public Involvement 23

Appendices
- A--Modifications and Clarifications 25
- B--Stipulations 29

Summary

The Bureau of Land Management's (BLM) Northeast National Petroleum Reserve-Alaska (NPR-A) Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) describes the future multiple-use management of 4 6 million acres of the NPR-A, consistent with existing statutory direction for its management The plan emphasizes restrictions on surface activities, consultation with local residents, and coordinated scientific studies to protect wildlife habitat, subsistence use areas, and other resources At the same time it makes approximately 87 percent of the planning area available for oil and gas leasing In reaching the decisions embodied in this Record of Decision (ROD), BLM has received extensive assistance from other Federal agencies, the State of Alaska, the North Slope Borough, and thousands of individuals and institutions who have shared their knowledge and insights about the resources and values associated with the planning area

This plan fulfills Congress's mandate in the Naval Petroleum Reserves Production Act (NPRPA) to conduct "an expeditious program of competitive leasing of oil and gas" and at the same time to protect the significant subsistence, environmental, fish and wildlife, and historic or scenic values "consistent with the requirements of this Act for the exploration of the reserve " Under the plan, important oil and gas resources, including those which may lie near the Alpine field now under construction just east of the Reserve, will be made available for leasing. Stipulations protect surface resources and subsistence activities throughout the planning area The plan also protects key surface resource and use areas identified through the planning process by strict restrictions on surface activities and, in 13 percent of the area, through a decision not to offer lands for oil and gas leasing Included among the areas receiving special protections are important habitat for waterfowl and caribou in the vicinity of Teshekpuk Lake, wildlife habitat and recreation and scenic areas along the Colville River and some of its tributaries, and subsistence use lands critical to local residents near Teshekpuk Lake and several rivers and creeks

The IAP/EIS analyzed six alternative future management plans for public comment, including the Preferred Alternative. Alternative A was the environmentally preferred alternative But because it offered no lands for oil and gas leasing, the BLM determined that it would not be appropriate for adoption because it fails to fulfill legislative mandates to provide opportunities for oil and gas development of the Reserve.

The IAP/EIS also determined that while the Preferred Alternative independent of associated cumulative effects did not reach the "may significantly restrict" threshold for impacts on subsistence applicable to section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), assessed with past, present, and anticipated cumulative effects, the Preferred

Alternative did cross that threshold The plan, however, meets the legal requirements for Federal actions which may result in a significant restriction on subsistence uses; i.e. the restriction is necessary, consistent with sound management principles for utilization of the public lands; the plan involves the minimal amount of public lands necessary to accomplish the purposes of such utilization; and reasonable steps will be taken to minimize adverse impacts on subsistence uses and resources resulting from the plan.

Decision

The plan described below is hereby adopted for future management in the northeast planning area of National Petroleum Reserve-Alaska. The plan adopted here is the Preferred Alternative presented in the *Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement* with minor clarifications and changes noted, explained, and evaluated in Appendix A. Comments offered by the public and other government agencies have resulted in these clarifications and minor modifications of the Preferred Alternative. We thank those who have helped us in this planning process through their comments.

The plan emphasizes restrictions on surface activities, consultation with local residents, and coordinated scientific studies to protect wildlife habitat, subsistence use areas, and other resources. At the same time it makes approximately 87 percent of the planning area's 4.6 million acres available for oil and gas leasing.

This decision culminates the Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) process. It fulfills the National Environmental Policy Act (NEPA) requirements associated with management planning on these public lands, including making decisions on what lands to make available for oil and gas leasing It serves as the NEPA documentation for the first oil and gas lease sale Subsequent lease sales are contemplated within the portion of the planning area made available for leasing Prior to authorizing future site-specific activity on these lands or conducting any additional lease sales, the Bureau of Land Management (BLM) will conduct the appropriate additional NEPA analysis, tiering from the IAP/EIS, if appropriate.

The decision is described below and includes the stipulations in Appendix B

Teshekpuk Lake Special Area

Teshekpuk Lake Surface Protection Area: This area is depicted in green (including the green hatched area) on Figure II.C 1 of the Final IAP/EIS reproduced here on page 3. It encompasses important goose molting areas, caribou calving and insect-relief habitat, and all of Teshekpuk Lake It is of special importance to subsistence users because of the caribou and fish resources in the area and long-standing subsistence use of the area. Within this area

- No permanent oil and gas surface occupancy will be allowed. (Note· Unless otherwise noted, reference to no permanent oil and gas occupancy would prohibit

pads, rigs, platforms, gravel roads, airstrips, gravel or other material extraction pits, and pipelines)

- No seasonal exploratory or delineation wells will be allowed.
- Ice roads, seismic activities, winter overland moves, and other nonpermanent activities other than exploratory or delineation well drilling may be authorized
- Oil and gas leasing will be allowed in the 5- to 6-mile band (hatched area on Fig II C 1) at the southern and western edge of this area. Rights to the subsurface resources under leases in this area will not include the uppermost 500 feet.
- Restrictions will be imposed on aircraft activity associated with permitted activities (See stipulations 52-55)

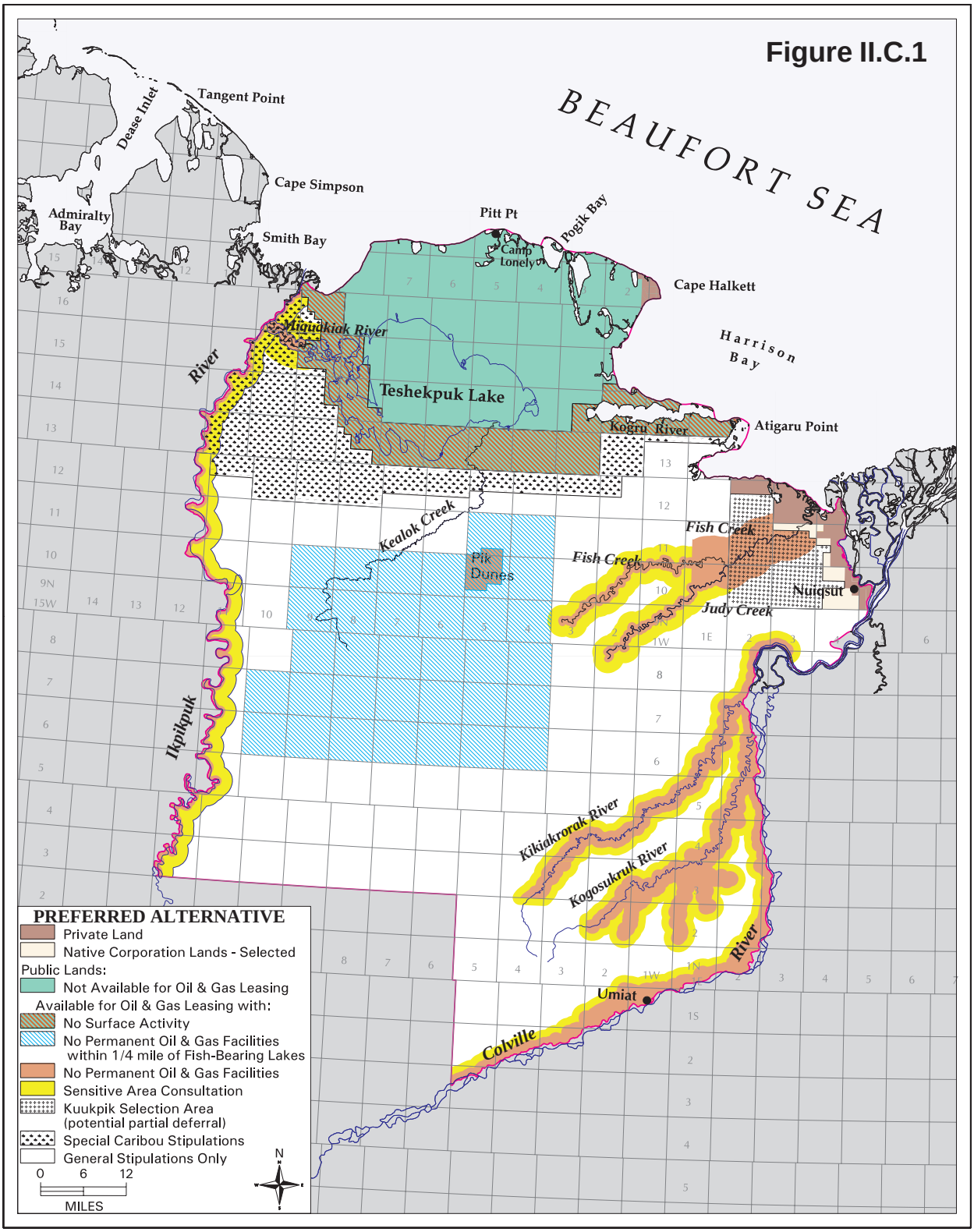
Miguakiak River:

- No permanent oil and gas surface facilities, except essential transportation crossings (roads and pipelines), will be allowed within ½ mile of the river
- An area within 3 miles of the river is of particular sensitivity for subsistence activities and will receive special consideration within the consultation framework described in stipulation 61.

Colville River Special Area

Colville River:

- The BLM will develop a Colville River Management Plan for the Special Area in cooperation with adjacent landowners and other affected parties to address subsistence, wildlife, recreation, paleontological, and other issues Prior to launching such a plan, the agency will conduct a raptor workshop to review scientific literature on disturbance to raptors and identify potential additional mitigation measures. Creation of a Bird Conservation Area as described in Section II B.6 of the Final IAP/EIS will be explored with other landowners as part of the Colville River Management Plan.
- No permanent oil and gas surface facilities, except essential pipeline crossings, will generally be allowed within 1 mile of the west bluffs (or bank if there is no bluff) extending the length of the river in the Colville River Raptor, Passerine and Moose Land Use Emphasis Area (LUEA) (Maps depicting this and other LUEAs mentioned in this document can be found in the Final IAP/EIS, pp II-4 to II-17)
- An area within 2 miles of the west bluff (or bank if there is no bluff) extending the length of the river in the Colville River Raptor, Passerine and Moose LUEA is of particular sensitivity for subsistence activities and wildlife and will receive special consideration within the consultation frameworks described respectively in stipulations 61 and 62.



/DATA9/FII.C.1.GRA (Color Comp)

- The Scenic Areas LUEA will be managed for Visual Resource Management (VRM) I upstream of Umiat and VRM II below Umiat, although exceptions to this management guidance will be allowed for subsistence structures and essential pipeline crossings.
- Even though the physical characteristics and associated resource values make the Colville River "eligible" for designation, the river has been determined not "suitable" for Wild & Scenic River (WSR) designation, because other landowners within the potential WSR corridor do not support this action and, without their cooperation, management as a WSR would be ineffective.

Kikiakrorak and Kogosukruk Rivers:

(Note: The following discussion refers only to portions of the Kikiakrorak River downstream from T. 2 N., R. 4 W., U.M. and the Kogosukruk River downstream from T. 2 N., R. 3 W., U.M.)

- No permanent oil and gas surface facilities, except essential transportation crossings, will be allowed within 1 mile of the bluff (or bank if there is no bluff) on either side of the rivers and several of the Kogosukruk tributaries.
- An area within 2 miles of the top of the bluff on either side of the rivers and several of the Kogosukruk's tributaries is of particular sensitivity for raptor nesting and will receive special consideration within the consultation framework described in stipulations 61 and 62.
- The BLM is being directed to prepare the necessary documents to add an area encompassing approximately 2 miles on either side of the rivers and the Kogosukruk's tributaries to the Colville River Special Area. The BLM will include management considerations for these areas in the Colville River Management Plan.

Umiat Recreation Site LUEA:

- Incorporate plans for future management of this area in the Colville River Management Plan. Emphasis is to be on supporting public health and safety.

Other Specific Areas in the Planning Area

Fish Creek:

- No permanent oil and gas surface facilities, except essential transportation crossings, will be allowed within 3 miles of the creek downstream from the eastern edge of Sec. 31, T. 11 N., R. 1 E., U.M. or within ½ mile of the creek farther upstream.
- An area within 2 miles of the creek in and above Sec. 31, T. 11 N., R. 1 E., U.M. is of particular sensitivity for subsistence activities and will receive special consideration within the consultation framework described in stipulation 61.

Judy Creek and Ikpikpuk River (in the planning area):

- No permanent oil and gas surface facilities, except essential transportation crossings, will be allowed within ½ mile of these waterbodies.
- An area within 2 miles of these waterbodies is of particular sensitivity for subsistence activities and will receive special consideration within the consultation framework described in stipulation 61.

Pik Dunes LUEA:

- No surface structures, except essential transportation crossings, will be allowed.
- The BLM is being directed to prepare the necessary documents to add the LUEA to the Teshekpuk Lake Special Area.

Deep-Water Lakes:

- No permanent oil and gas surface facilities will be allowed in the lake bed of fish-bearing lakes in this portion of the Fish Habitat LUEA. Nor will such occupancy be allowed within ¼ mile of these fish-bearing lakes.

Kuukpik Corporation Entitlement:

- The BLM has asked Kuukpik to identify twice its underselection acreage. In its first oil and gas lease sale, BLM will defer from leasing those lands Kuukpik identifies.

The plan also includes decisions which apply to the entire planning area. These are incorporated in the stipulations for the plan which are listed in Appendix B. They address such topics as waste prevention, handling, and disposal; preventive measures and preparation and response to spills; ice roads and water use; overland moves and seismic work (which are allowed throughout the planning area subject to stipulations); oil and gas exploratory drilling; facility design and construction; ground transportation; air traffic; oil field abandonment; and subsistence.

The plan establishes procedures and advisory bodies to address subsistence and research (inventory and monitoring) concerns. Stipulation 61 describes a conflict avoidance procedure to address subsistence concerns with oil and gas exploration and development activities. Through it, lessees will consult with the North Slope Borough (NSB), affected communities, and the Subsistence Advisory Panel, a special body created to represent subsistence issues (See Sec. II.F.6 of the Final IAP/EIS). Under the plan, representatives from Federal, State, and NSB agencies, the oil industry, environmental groups, academia, and other interested parties will be invited to participate on a Research and Monitoring Team. This team will coordinate research and monitoring projects related to the effectiveness of stipulations and surface resource impacts. It also will seek advice from the Subsistence Advisory Panel (See

Sec. II.F.7 of the Final IAP/EIS). The team will be chartered in accordance with the Federal Advisory Committee Act.

Many of the geographically-specific restrictions listed above are also included in the stipulations. Nearly all stipulations are subject to an exception clause. Exceptions to a stipulation may be granted under strict conditions. In the event that an exception to a lease or permit stipulation is requested and before an exception may be granted, the AO shall find that implementation of the stipulation is:

1. a) technically not feasible or
   b) economically prohibitive or
   c) an environmentally preferable alternative is available, and
2. the alternative means proposed by the lessee fully satisfies the objective(s) of the stipulation.

In addition, prior to the consideration or granting of an exception to a lease or permit, all conditions and/or consultation requirements specific to a stipulation must be met. The Authorized Officer (AO) shall consult with appropriate Federal, State, and NSB regulatory and resource agencies before an exception may be granted, except in the case of an emergency. The AO's power to grant stipulation exceptions is limited to those subjects, uses, and permits over which the BLM has authority. Exceptions also may be granted in emergencies involving human health and safety.

Some decisions listed above and in the stipulations are not subject to the exception clause. These include:

1. decisions on the areas to be available or unavailable for oil and gas leasing,
2. prohibition of permanent roads connecting to a road system outside the planning area,
3. prohibitions on pipeline and road crossings in the setback area around Teshekpuk Lake and road crossings in the setback area adjacent to the Colville River, and
4. prohibitions on permanent oil and gas surface occupancy in the Teshekpuk Lake Surface Protection Area

The plan will not affect other non-discretionary BLM responsibilities mandated by Congress. Chief among these is conveyance of land to individual Alaskan Natives and to Native corporations under the Native Allotment Act and the Alaska Native Claims Settlement Act (ANCSA), respectively.

Alternatives Considered

The *Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement* presented the Preferred Alternative and 5 other alternatives.

Preferred Alternative: The Preferred Alternative is nearly identical to the plan described in this Record of Decision. (See Appendix A for explanations of minor clarifications and changes.) It would maximize protection for molting geese by making virtually all of the Goose Molting Habitat LUEA unavailable for leasing. The Preferred Alternative would protect caribou calving areas in the Teshekpuk Lake Caribou LUEA by not making 48 percent of the LUEA available for oil and gas leasing (including the key caribou movement corridors), buffered by an area (30% of the LUEA) available for leasing but with no surface oil and gas activities allowed (including no exploratory drilling), and a small portion (22%) available, subject to stipulations specifically designed to limit impacts. The Preferred Alternative would make 87 percent of the planning area (4,007,000 acres and 67% of the area of high oil and gas potential) available for oil and gas leasing and allows seismic operations throughout the area subject to stipulations. The Preferred Alternative also establishes procedures and advisory bodies to address subsistence and research (inventory and monitoring) concerns.

Alternative A: This alternative is the No Action alternative. It reflects current BLM management of the planning area and a decision BLM has made that the 1983 EIS for leasing in the 1980s is inadequate for renewed leasing. No new oil and gas leasing would occur, no new designations such as Special Areas or Wild and Scenic Rivers would be proposed, and protection of surface resources from other activities would be provided by existing Special Area designations, Special Management Zones, and existing stipulations. Under this alternative two options exist with regard to seismic activity. Winter seismic activity could occur throughout the planning area (the existing management situation), or seismic activity could be prohibited. Alternative A is the **environmentally preferable alternative**, because it would forbid oil and gas leasing, the most likely activity to create environmental impacts. This alternative, however, was not chosen because it would not fulfill the legislative direction to make lands in the Reserve available for oil and gas development.

Alternative B: Alternative B would make 53 percent of the planning area available for oil and gas leasing while emphasizing protection of specific surface resources. With the exception of the Kuukpik Corporation Entitlement LUEA, none of the LUEAs would be made available for oil and gas leasing. Leasing in the Kuukpik Corporation Entitlement LUEA would be postponed until the corporation's entitlement has been satisfied. Aboveground

pipelines could cross all lands except the Potential Colville Wild and Scenic River LUEA, and all lands would be available for seismic studies. Protective measures include applying the stipulations described in the Draft and Final IAP/EISs, recommending a portion of the Colville be included as a wild river in the WSR System, proposing a Bird Conservation Area along the Colville River, designating the Ikpikpuk Paleontological Sites LUEA as a new Special Area to protect paleontological resources, and adding the Pik Dunes LUEA to the Teshekpuk Lake Special Area. BLM would undertake plans for areas receiving new designations.

Alternative C: Alternative C would make 72 percent of the planning area available for oil and gas leasing. The Teshekpuk Lake Caribou Habitat LUEA and the Goose Molting Habitat LUEA, which contain important caribou and waterfowl habitat, would not be made available. The Kuukpik Corporation Entitlement LUEA would be available for oil and gas leasing, and all appropriate sale and leasing revenues due Arctic Slope Regional Corporation (ASRC) would be put in escrow. Aboveground pipelines could cross all lands, and all lands would be available for seismic studies. Protective measures would include applying stipulations described in the Draft and Final IAP/EISs, recommending a portion of the Colville be included as a scenic river in the WSR System, and proposing the same management designations for a Bird Conservation Area (BCA) and the Ikpikpuk Paleontological Sites and Pik Dunes LUEAs as noted for Alternative B. BLM would undertake plans for areas receiving new designations.

Alternative D: Alternative D would make 90 percent of the planning area available for oil and gas leasing. The Goose Molting Habitat LUEA would not be made available. The Kuukpik Corporation Entitlement LUEA would be available for oil and gas leasing, and all appropriate sale and leasing revenues due ASRC would be put in escrow. Aboveground pipelines could cross all lands within the planning area, and all lands would be available for seismic studies. Stipulations would protect caribou in the part of the Teshekpuk Lake Caribou Habitat LUEA available for oil and gas leasing. Other protective measures include applying other relevant stipulations described in the Draft and Final IAP/EISs, recommending a portion of the Colville be included as a recreational river in the WSR System, and proposing the same management designations for a BCA and the Ikpikpuk Paleontological Sites and Pik Dunes LUEAs as noted for Alternative B. BLM would undertake plans for areas receiving new designations. In addition, the agency would conduct an interagency wildlife management plan focusing on caribou and waterbird populations within the Teshekpuk Lake Caribou Habitat and the Goose Molting LUEAs.

Alternative E: Alternative E makes all BLM-administered lands in the planning area available to oil and gas leasing. The Kuukpik Corporation Entitlement LUEA would be available for oil and gas leasing, and all appropriate sale and leasing revenues due ASRC

would be put in escrow. Aboveground pipelines could cross all lands within the planning area, and all lands would be available for seismic studies. Stipulations would protect caribou in the Teshekpuk Lake Caribou Habitat LUEA and others would protect waterfowl in the Goose Molting Habitat LUEA. Other protective measures would include applying other relevant stipulations described in the Draft and Final IAP/EISs and proposing the same management designations for a BCA and the Ikpikpuk Paleontological Sites and Pik Dunes LUEAs as noted for Alternative B. BLM would undertake plans and studies similar to those anticipated for Alternative D.

Management Considerations

This plan fulfills Congress's mandate in the Naval Petroleum Reserves Production Act (NPRPA) to conduct "an expeditious program of competitive leasing of oil and gas" and at the same time to protect the significant subsistence, environmental, fish and wildlife, and historic or scenic values "consistent with the requirements of this Act for the exploration of the reserve." This plan meets the total energy needs of the nation by making 87 percent of the planning area available for leasing, including lands nearest current oil development immediately to the east of the Reserve. Maximum protection of important surface resources is provided in Special Areas designated by the Secretary through a combination of prohibitions, restrictions, and stipulations restricting oil and gas facilities and other activities which might adversely impact wildlife habitat and subsistence use areas, as well as by positive management approaches.

Because of the years required to find, delineate, and develop a producing oil field in the remote arctic environment, oil leasing is not conducted to meet today's need but future projected needs. The U.S. currently imports about half its oil supply, and the Federal government projects that the proportion of the Nation's oil coming from overseas will continue to climb, approaching two-thirds by 2020. The Department of Energy also reports that domestic oil and gas production in the U.S. overall is declining, as it is on the North Slope of Alaska. Oil produced from the NPR-A would be transported using excess capacity of the existing Trans-Alaska Pipeline System, which would be available in the timeframe projected for development of new NPR-A fields. The Department of Energy also reports that importation of foreign oil significantly exacerbates this country's trade deficit. Domestic oil production, especially on Federal lands, contributes directly to the health of the Nation's economy and to Federal revenues. Most NPR-A oil is expected to be processed and consumed domestically. Even if a small portion of NPR-A oil may be exported, it can still help in the nation's trade imbalance and thereby indirectly help meet the nation's energy needs. Demand for petroleum is typically proportionately greater in relation to supply on the East Coast than on the West Coast. Because of transportation costs, the nation can obtain more oil with a given amount of money by purchasing foreign oil for the East Coast than shipping Alaskan oil there. Viewed in terms of a balance of trade, exporting an amount of Alaskan oil can produce export revenues which can be applied to purchase a greater amount of imported oil. In addition, the oil industry provides jobs, many of them high-skill and high-paying. Finally, lease sales, rentals, bonuses, and royalties from Federal oil and gas leases contribute to the Federal treasury, as do taxes paid by oil companies and their workers.

Federal law, including the NPRPA, the Federal Land Policy and Management Act (FLPMA), ANILCA, NEPA, and the Wild and Scenic Rivers Act, requires BLM to protect soil, water,

air, vegetation, wildlife, archaeological and paleontological resources, and subsistence uses. These resources are protected through prohibitions, restrictions, and stipulations on oil and gas and other activities which will effectively minimize environmental impacts, as well as through positive management approaches, such as Special Area designations, the development of the Colville River Management Plan, and other protective management measures.

The Alaska National Interest Lands Conservation Act (ANILCA) § 810 mandates special consideration for subsistence resources and uses. Subsistence concerns were also identified early in the planning process as a major management consideration. The plan includes special measures to protect subsistence use areas (e.g. Teshekpuk Lake, Fish and Judy Creeks and Miguakiak River and cabins and campsites) and wildlife habitats for waterfowl, caribou, and fish. In addition, to assure that subsistence resources and access to those resources are protected, the plan requires the integration of a consultation process into future oil and gas exploration and development. As part of this consultation process, BLM will institute a Subsistence Advisory Panel which will advise both industry and the agency on potential conflicts between proposed development actions and subsistence activities. Stipulations in the plan also provide for continued reasonable access by subsistence users through developed areas, avoiding as much as possible any restrictions on access to subsistence resources. The plan specifically prohibits an interconnecting road network linking the planning area to existing oil fields and roads to the east, thus alleviating concerns about possible increased competition for subsistence resources from persons residing outside the region.

Through the planning process, BLM has also identified significant wildlife concerns and has provided special protection for important habitats for waterfowl, caribou, raptors, and fish. Most of these specially protected areas fall within the existing secretarially-designated Special Areas. The decisions in this ROD provide maximum protection for the significant subsistence, recreational, fish and wildlife, historical, and scenic values of these Special Areas, consistent with the requirements of the NPRPA for exploration of the Reserve. In addition, the plan recommends that the Secretary add the Pik Dunes to the Teshekpuk Lake Special Area and the upper reaches of the Kikiakrorak and Kogosukruk Rivers (and certain tributaries of the latter) to the Colville River Special Area in recognition of the surface values of these areas.

The planning process identified caribou calving and insect-relief habitat, specifically that for the Teshekpuk Lake Caribou Herd, as meriting special management consideration. This herd is important for area residents' subsistence. For example, approximately a third of the subsistence diet of Nuiqsut residents comes from caribou. The plan prohibits permanent oil and gas facilities and seasonal exploratory and delineation wells in the great majority of the Teshekpuk Lake Caribou Herd's calving and insect relief habitat. Under the plan, permanent oil and gas surface facilities would not be allowed in the vast majority of the most valuable

caribou habitat, including movement corridors at pinch-points east and northwest of Teshekpuk Lake. In the part of the caribou calving habitat in which oil surface facilities will be allowed, special stipulations have been formulated to mitigate disturbance to the habitat or delay or deflection of caribou movements.

Fish is another important subsistence resource. Besides establishing stipulations which protect the water resource throughout the planning area (e.g., limits on water withdrawals from fish-bearing streams and lakes, refueling setbacks from stream and lake banks), the plan will forbid permanent oil and gas facilities in or within a 1/4 mile of certain deep water lakes used by fish. There are also similar, but in some cases larger, setbacks from several streams identified as important by North Slope subsistence users. These setbacks, such as from Fish and Judy Creeks and the Miguakiak River, help assure subsistence users' access to important subsistence areas and that fish and game in these areas are not disturbed.

The goose molting habitat north and east of Teshekpuk Lake merits special protection. It is the most important molting habitat in the Arctic, accounting for substantial numbers of Pacific flyway bird molting populations; up to 23 percent of brant molt in the area. During the flightless molting stage, the birds are extremely sensitive to disturbance. They must simultaneously grow new feathers and build up their reserves of energy to prepare for their long fall migration south. As a consequence, the plan prohibits oil and gas leasing in nearly all of the molting habitat in the planning area, and forbids permanent oil and gas facilities throughout the entire molting habitat.

The plan also offers special protection for raptor habitat. The bluffs of the Colville River and two of its tributaries, the Kikiakrorak and Kogosukruk Rivers, are important habitat for raptor species, including peregrine falcons which were on the threatened and endangered species list until 1994. Permanent oil and gas facilities will generally be prohibited under the plan from an area within a mile of these bluffs and the Colville River Management Plan will further address the need for protecting this important habitat.

In order to better manage the planning area, there is a need for additional information on animal populations and their habitats, the impacts of human activities on those populations and their habitats, and the effectiveness of various mitigating measures. The plan endorses additional research and monitoring and calls for the creation of an Research and Monitoring Team to coordinate this work.

The plan does not alter BLM's obligation to convey lands to the State of Alaska and to Native corporations and individuals, in accordance with the Alaska Statehood Act, the Alaska Native Claims Settlement Act (ANCSA), and the Native Allotment Act. The plan, however, does acknowledge the ANCSA selection rights of Kuukpik Corporation. To minimize the chance

that lands will be conveyed to the corporation encumbered with oil and gas leases, the plan calls for BLM to withhold from the first lease sale up to approximately 42,000 acres (twice Kuukpik's remaining entitlement) which are identified by the corporation.

ANILCA Section 810 Summary

The Alaska National Interest Lands Conservation Act (ANILCA) § 810(a) requires that a subsistence evaluation be completed for this IAP/EIS. The ANILCA also requires that this evaluation include findings on three specific issues:

1. the effect of such use, occupancy, or disposition on subsistence uses and needs;
2. the availability of other lands for the purposes sought to be achieved; and
3. other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 U.S.C. § 3120(a)).

The following discussion summarizes the ANILCA § 810 evaluation for the Preferred Alternative which was set out in greater detail in Appendix D of the Final IAP/EIS. The minor clarifications and modifications of the plan described in Appendix A of this ROD were also reviewed and found to have no effect which would change the subsistence evaluation and findings. Many of the changes only clarify language, while not changing the substance of the decision; change administrative arrangements with no substantial environmental impact; or allow changes in on-the-ground management under stringent conditions which would result in no substantial environmental impact.

a. *Without the Cumulative Case*: The effects of the plan adopted in this ROD fall below the "may significantly restrict" threshold, which is the test for a positive finding under ANILCA § 810. The impacts to subsistence resources and uses for this alternative are minimal. This finding applies to villages in and near the planning area and to subsistence users in other regions of Alaska, including southwestern Alaska.

b. *With the Cumulative Case:* The effects of the cumulative case presented in Section IV.H of the Final IAP/EIS exceeds the "may significantly restrict" threshold, and thus a positive ANILCA § 810 determination must be made. Although the effects of the activities proposed under the plan adopted in this ROD fall below the threshold, adding them to those of the cumulative case results in a level of effects that "may significantly restrict" subsistence uses.

The ANILCA § 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the Federal agency gives the required notice and holds a hearing in accordance with § 810(a)(1) and (2), and makes the three determinations required by § 810(a)(3)(A), (B), and (C). The BLM has found in this subsistence evaluation that all the

alternatives considered in this IAP/EIS (including the no-action alternative), when considered together with all the past, present, and reasonably foreseeable future cumulative effects discussed in the EIS, may significantly restrict subsistence uses. Therefore, BLM undertook the notice and hearing procedures required by ANILCA § 810(a)(1) and (2), as described above, and now must make the three determinations required by § 810(a)(3)(A), (B), and (C). 16 U.S.C. § 3120(a)(3)(A), (B), and (C).

We have determined that the plan meets the following requirements (16 U.S.C. § 3120(a)(3)(A), (B), and (C)) for Federal actions that may result in a significant restriction on subsistence uses:

1. *The significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands.*
   Only when considered together with cumulative effects of possible oil and gas activities on adjacent lands that are not under BLM's control, does the possibility exist that all the activities combined may significantly restrict subsistence uses. This possible restriction on subsistence uses could be lessened somewhat by not making any of the planning area available for oil and gas leasing, but this would not accomplish the management objectives for the planning area as guided by the statutory directives in the NPRPA, FLPMA, and other applicable laws, and for which the IAP was undertaken. The management principles under which the northeast NPR-A planning area is to be managed calls for an "expeditious program of competitive leasing of oil and gas" while providing for the protection of significant surface values, including environmental, fish and wildlife, historical, scenic and subsistence values. Moreover, even if BLM were to adopt the no-action alternative, the cumulative impacts on surrounding lands still would reach the may-significantly-restrict threshold under ANILCA § 810. The effects of the actions approved in this plan on subsistence resources and uses have been found to be very minimal. The BLM, therefore, has determined that the significant restriction that may occur under the plan when considered together with the cumulative case is necessary consistent with sound management principles for the utilization of these public lands.
2. *The proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition.*
   Given the legislative mandates cited above and the management objectives for which the IAP was undertaken, the process for determining which lands to offer for oil and gas leasing in the NPR-A did not focus solely on minimizing the total number of acres offered, although that was an important factor. Given economic limitations, that approach would have resulted in lease sales including more of the northernmost (highest prospect) part of the planning area, which might have

involved less total acres but which would have more intensively impacted the most critical habitat for subsistence resources. The plan instead combines prohibitions on leasing and oil and gas exploration and development on the most sensitive fish and wildlife lands with strict prohibitions on surface activities on other lands which are to be available for leasing. The restrictions on surface activities on both the leased and unleased lands protect fish and wildlife resources important to subsistence. It has been determined that the plan makes available the minimal amount of public lands necessary to carry out a successful leasing program at normal ($18 a barrel) price levels while still excluding or restricting oil and gas leasing and surface activities in the areas most important for subsistence resources and uses. Offering an even smaller, more southerly portion of the planning area for leasing would be significantly less likely to lead to the development of economically viable stand alone fields, given the economics of operations in this remote area, distances from existing infrastructure, future variations in oil prices that must be anticipated, and the restrictions imposed on surface activities and facilities which increase environmental and subsistence protections but also increase the costs to industry.

3. *Reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.*
   The plan, including its stipulations, provides many significant protections for subsistence uses and resources. These include restrictions on activities by oil and gas lessees, such as forbidding permanent oil and gas facilities in important subsistence use areas, including Teshekpuk Lake, the Miguakiak River, Fish and Judy Creeks, and near known long-term cabins and campsites. In addition, consultation with North Slope communities, the NSB, and the Subsistence Advisory Panel (an organization specifically established by the plan to advise BLM on matters of concern for subsistence users) must precede approval of oil and gas exploration and development permits. Stipulations also protect subsistence resources and their habitats through a multitude of restrictions on human activities in the planning area. Examples include stipulations regulating use and disposal of contaminants which could damage habitat, setbacks for certain activities from streams and lakes, and seasonal and spacial restrictions on activities near caribou calving areas. Roads linking the planning area to the infrastructure to the east have been prohibited, thus avoiding competition for subsistence reources from outsiders that improved access to the area might bring. The plan as a whole has been found to have only minimal impacts on subsistence resources and uses. Consequently, it has been determined that reasonable steps will be taken to minimize adverse impacts on subsistence uses and resources.

Mitigation and Monitoring

Stipulations designed to protect the resources and uses of the planning area are listed in Appendix B. These stipulations include restrictions and guidelines on waste and spill prevention, handling, and disposal; overland moves and seismic surveys; oil and gas exploratory drilling, facility design, construction, and field abandonment; ground and air transportation; and other activities. They also contain additional special stipulations to protect subsistence resources and activities and traditional land use sites. Additional protective measures may be developed as part of NEPA evaluations of subsequent site-specific authorizations, including exploration and development plans, and of any second or subsequent oil and gas lease sales. It has been determined that all practical means to avoid or minimize environmental harm from the Preferred Alternative (as slightly modified by this ROD) have been adopted in this IAP/EIS.

Monitoring will be undertaken to determine the status of the various resources in the planning area, to ensure compliance with and enforcement of plan decisions and with stipulations attached to separate land use authorizations, and to measure the effectiveness of protective measures. The Research and Monitoring Team will help guide the monitoring effort in the planning area.

Public Involvement

The public and other government agencies have provided valuable comments throughout the planning process. The public outreach effort is described in Sections V and VI of the Final IAP/EIS. This effort included:

- A 30-day scoping period (later extended to more than 60 days) began February 13, 1997, with the issuance of the Notice of Intent to prepare the Northeast NPR-A IAP/EIS. More than 175 people attended five scoping meetings in Alaskan communities in March and April and BLM received 101 written scoping comments.
- The BLM and the Minerals Management Service, which helped BLM develop the IAP/EIS, held a public NPR-A science symposium in April 1997 to gather the most current scientific information and traditional knowledge relevant to the planning area's resources and uses.
- Federal, State, and NSB agency personnel met in April 1997 to develop preliminary alternatives.
- In May 1997 Federal, State, and NSB biologists met to help formulate protective measures for caribou and waterfowl in the Teshekpuk Lake area.
- Federal, State, NSB, and North Slope tribal government representatives met in Nuiqsut in August 1997 to draft measures to protect subsistence resources and their uses. Public meetings were held in Nuiqsut and Barrow in conjunction with this subsistence workshop effort.
- The U.S. Geological Survey's Biological Survey Division coordinated a peer review of the descriptions of the affected environment and the environmental consequences sections of the IAP/EIS. In addition, State, NSB, and Fish and Wildlife Service personnel joined BLM and MMS staff in a final review of the document prior to printing the Draft IAP/EIS.

  A 90-day review period was accorded the public on the Draft IAP/EIS. To facilitate communications from the public, comments were received by mail, e-mail, and via the BLM's NPR-A website. Also, public hearings were held in January 1998 on the IAP/EIS in Anaktuvuk Pass, Anchorage, Atqasuk, Barrow, Fairbanks, Nuiqsut, and Wainwright, Alaska, as well as Washington, D.C. and San Francisco. Upon the request of southwest Alaska residents, a subsistence hearing was held in Bethel and information meetings were held at Bethel and Hooper Bay. BLM received approximately 7,000 written comment messages and nearly 200 people testified at the public meetings on the Draft IAP/EIS. These comments were analyzed and the Final IAP/EIS reflected changes suggested by the commentors and responded to the comments offered on the draft.

- There was a 30-day comment period on the Final IAP/EIS. BLM received approximately 900 written comments by mail, e-mail, or over its internet website. The great majority of the respondents wrote to express opposition to oil and gas leasing in the planning area. They expressed essentially the same concerns as were enunciated during the comment period on the draft, and in addition commonly noted that the Preferred Alternative's proposal to lease up to 87 percent of the planning area did not strike a balance between development and surface resource protection. Other commentors offered specific suggestions for improvements and clarifications in the plan. We have considered these comments. Appendix A highlights the clarifications and slight modifications to the plan adopted as a result of these comments. Some responses raised concerns not aired during the comment period on the Draft IAP/EIS which have not resulted in changes. For example, some urged that we develop new regulations governing management of the Special Areas. We have not done so. The management plan itself sets management direction for the Special Areas so new regulations are not necessary. Some commentors stated that the pipeline will be worn out before NPR-A oil could pass through it, and asserted that our analysis should have included an assessment of impacts of the reconstruction of the pipeline. Pipeline maintenance and repair is on-going, but no special reconstruction is anticipated to bring NPR-A oil to market. Some commentors urged that exploratory drilling be allowed in the No Surface Activity area generally east, south, and west of Teshekpuk Lake. It has been determined, however, that the surface resources of the area merited the protection assured by this prohibition.

Appendix A
Modifications and Clarifications

The following list highlights clarifications and minor modifications in the Preferred Alternative as presented in the Final IAP/EIS adopted in this ROD.

1. Some commentors stated that non-governmental groups could contribute important expertise and perspective to a Research and Monitoring Team. We agree and have revised the ROD to broaden participation on it. The ROD drops "Interagency" from the Interagency Research and Monitoring Team's title proposed in the Final IAP/EIS, describes the Research and Monitoring Team as one composed of "representatives from Federal, State, and NSB agencies, the oil industry, environmental groups, academia, and other interested parties," and notes that this team will be chartered in accordance with the Federal Advisory Committee Act. This will allow the BLM to better benefit from the information and insights of a broad range of expertise. This change in the composition of the Research and Monitoring Team will have no substantial impacts relevant to the environment; through the integration of greater knowledge from the broader membership, impacts may, in fact, be further reduced.

2. Some commentors noted that the prohibition on exploratory drilling in lakes included in stipulation 28 may force drilling onto less environmentally desirable locations. There are some lakes in the planning area that do not support a fish community or abundant or diverse summer bird populations. These are commonly shallow lakes which freeze to the bottom by mid winter and many are isolated and not hydrologically connected to adjacent wetlands. Two new sentences are added to the end of this stipulation to make it clear that exceptions are allowed in certain limited circumstances set out in the sentences. Under the very limited circumstances in which this exception might be allowed, this is an insubstantial change relevant to environmental concerns because an exception may be authorized only where it would be environmentally preferable to maintaining the restriction and few resources are put at risk.

3. The North Slope Borough requested that decisions regarding the applicability of setbacks near known, long-term cabins and campsites as described in stipulations 23, 26, and 47 be a matter addressed in the consultation process described in stipulation 61. This would help assure that protection of these sites is provided in appropriate cases and that the AO will be better informed of cases in which the

setbacks might be waived without harm, such as when a cabin or campsite is not going to be in use during the period when winter seismic operations or exploratory drilling might occur. We have added language to each of these stipulations to bring them within the consultation process described in stipulation 61. We have also added a paragraph in stipulation 61 so that the consultation process for cabins and campsites is triggered by geophysical (i.e. seismic) permitting, as well as by exploration and development and production plans. This expansion of the consultation process would have no substantially changed effects relevant to the environment; indeed, by better informing the AO of the situation on the ground, it should improve management of these public lands.

4. Some commentors suggested that the consultation process for subsistence concerns near important wildlife, especially raptor, habitat near the Colville River and some of its tributaries should be expanded to also address wildlife concerns. This had been our intention, but the Final IAP/EIS did not reflect this. We have added a paragraph to the end of stipulation 62 to address this oversight. This expansion of the consultation process would have no substantial effects relevant to the environment; indeed, by better informing the AO of the situation on the ground, it should improve management of these public lands.

5. We received a suggestion that stipulation 27 be modified to specifically state that gravel pads will not be constructed for oil and gas exploration. This had been our intent; we assumed permanent facilities to include gravel pads. We believe that gravel pad construction for exploration is highly unlikely, as well as environmentally undesirable. The oil industry has indicated that it uses ice pads for such operations. To assure that no deviation from this practice occurs, we have specifically prohibited constructing gravel pads for exploratory drilling operations. This modification in the language of the stipulation will have no substantial effects relevant to environmental concerns since it simply clarifies a prohibition already assumed to be in place.

6. Language has been modified in the plan to clarify the deferral from leasing of lands the Kuukpik Corporation identifies. It was not our intention to require that Kuukpik commit to take its ANCSA selections from the lands it identifies prior to the first lease sale. The revised language describing the plan decision relevant to the Kuukpik Corporation Entitlement area clarifies this point, while retaining the limitation on the amount of land Kuukpik may ask to have deferred, i.e. twice its remaining entitlement. This clarification would have no substantial effects relevant to environmental concerns since the lands are still deferred from the first sale as indicated in the plan's prescribed management.

7. The Final IAP/EIS intentionally did not prohibit seismic operations and included stipulations 23 and 24 to provide guidelines on how seismic activities are to be conducted. Furthermore, in describing the Preferred Alternative, the Final IAP/EIS stated explicitly that seismic work would be permitted in the Teshekpuk Lake Special Protection Area and cites seismic operations as one of a number of authorized activities which shall comply with the stipulations. The Final IAP/EIS, however, inadvertently failed to state our intent that seismic operations be allowed throughout the planning area subject to stipulations. To assure that there is no confusion on this point, we have made a technical correction clarifying that seismic work will be allowed. This clarification will have no substantial effects relevant to the environment, since it does not reflect any change in the plan's prescribed management.

8. The Final IAP/EIS mistakenly indicated that four tributaries of the Kikiakrorak River, rather than the Kogosukruk River, were included in a 1-mile setback for oil and gas facilities described in stipulation 39 and the 2-mile consultation zones described in stipulation 62. Stipulations 39h, 39i, 62f, and 62g have been modified to correct this. This technical correction will have no impact relevant to the environment, since it does not reflect any change in the plan's prescribed management.

9. The Final IAP/EIS mistakenly used inconsistent language in describing prohibitions on permanent oil and gas facilities in the Teshekpuk Lake Surface Protection Area. Stipulation 31 has been reworded to accurately reflect the prohibitions stated in the description of the plan. This clarification will have no impacts relevant to the environment, since it does not reflect any change in the plan's prescribed management.

10. The final paragraph of stipulation 39 has been clarified to make it clearer that no exceptions will be granted to allow pipeline or road crossings in the Teshekpuk Lake setback area or road crossings in the the Colville River setback area. This clarification will have no substantial impacts relevant to environmental concerns because it makes no change in the plan's prescribed management.

11. The ROD adds language to stipulation 48 to clarify the intent that roads from the planning area to areas outside the area, including docks, are prohibited by the plan and no exceptions will be granted. It also has been reworded to reflect the Final IAP/EIS's intention that roads within an oil and gas field must be constructed to minimize environmental impacts and that roads between fields can only be approved after public comment and consultation with appropriate resource

agencies. These clarifications will have no substantial effect relevant to environmental concerns because they simply add consultation and make no changes in the plan's prescribed management.

Appendix B
Stipulations

The following definitions apply to the following stipulations:

Active Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum that area subject to a 1 percent or greater chance of flooding in any given year (also referred to as the 100-year or base floodplain).

Body of Water or Waterbody: A lake, river, stream, creek, or pond that holds water throughout the summer and supports a minimum of aquatic life.

Permanent oil and gas facilities: Production facilities, pipelines, roads, airstrips, production pads, docks and other bottom-founded structures, seawater-treatment plants, and any other structure associated with an oil and gas operation that occupies land for more than one winter season. It does not include material sites or seasonal facilities such as ice roads and ice pads.

The following stipulations are based on existing policies and laws, and on knowledge of the resources present in the planning area and current industry practices. All stipulations will attach to all activities, including oil and gas leases issued in the planning area. All oil and gas activity permits issued subsequent to leasing shall comply with the appropriate lease stipulations specific to the activity under review. All permits issued in conjunction with other authorized activities (e.g., seismic operation, commercial guiding) within the planning area shall comply with the appropriate stipulations specific to the activity under review.

Additional site-specific stipulations may be added by the Authorized Officer (AO) as determined necessary by further NEPA analysis and as developed through consultation with other Federal, State, and NSB regulatory and resource agencies. Other Federal, State, and NSB permits (e.g., NPDES, Clean Water Act [CWA] Section 404) also may be required by law or regulation for an oil and gas project to proceed. A list of permits/approvals commonly required in conjunction with an oil and gas exploration and development project is provided in Table II.F.1 of the Final IAP/EIS. (All references to tables and figures in these stipulations are to the tables and figures in the Final IAP/EIS. Also see the Final IAP/EIS for maps of Land Use Emphasis Areas (LUEAs) referred to in these stipulations.) Additional permits not listed in Table II.F.1 may be required. Specific State permits are required when the State has primary authority, under Federal or State law or regulation, for enforcement of the provision in question. Specific permits issued by Federal agencies other than BLM could include permit conditions that are more stringent than those presented below.

Exception Clause: In the event that an exception to a lease or permit stipulation is requested and before an exception may be granted, the AO shall find that implementation of the stipulation is:

1. a) technically not feasible or
   b) economically prohibitive or
   c) an environmentally preferable alternative is available, and
2. the alternative means proposed by the lessee fully satisfies the objective(s)of the stipulation.

In addition, prior to the consideration or granting of an exception to a lease or permit stipulation, all conditions and/or consultation requirements specific to a stipulation must be met. The AO shall consult with appropriate Federal, State, and NSB regulatory and resource agencies before an exception may be granted, except in the case of an emergency. The AO's power to grant stipulation exceptions is limited to those subjects, uses, and permits over which the BLM has authority. Exceptions may be granted in emergencies involving human health and safety.

Waste Prevention, Handling, and Disposal and Spills:

1. To prevent and minimize present and future pollution, management decisions affecting waste generation shall be addressed in the following order of priority:

   -Prevention and Reduction
   -Recycling
   -Treatment
   -Disposal

   a. Lessees shall prepare a waste-management plan approved by the AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, to achieve specific waste-reduction and prevention goals for all phases of exploration and development (including activities conducted by contractors). The plan shall identify all waste streams that will be produced during each operation by type, volume, and toxicity and the method of disposal. For each waste stream, the lessee/operator shall describe what actions will be taken to minimize the volume. The plan should include activities that will integrate pollution prevention concepts into purchasing, inventory, shipping/receiving, operations maintenance, training, accounting, and design. The goal of the plan shall be continuous environmental improvement and achievement of reduction goals developed through the planning process. Lessees shall develop schedules for implementation and review to meet reduction and prevention goals, designate accountable personnel to carry out action items, and specify budget line items for plan elements. Lessees shall provide the AO with an annual waste-management report.

   b. Lessees shall implement a hazardous-materials tracking system to ensure proper use, storage, and management of materials being used within industrial processes. The use of chlorinated solvents is prohibited.

   c. Lessees shall conduct annual environmental compliance audits.

2. Attracting wildlife to food and garbage is prohibited. All feasible precautions shall be taken to avoid attracting wildlife to food and garbage. A current list of approved precautions, specific to type of permitted use, can be obtained from the AO. Lessees and permitted users shall have a written procedure to ensure that the handling and disposal of putrescible waste will be accomplished in a manner to prevent the attraction of wildlife.

3. Burial of garbage is prohibited. All putrescible waste shall be incinerated or composted through an AO-approved system, unless otherwise authorized by the AO. All solid waste, including incinerator ash, shall be removed from BLM lands and disposed of in an approved waste-disposal facility in accordance with U.S. Environmental Protection Agency (USEPA) and State of Alaska, Dept. of Environmental Conservation (ADEC) regulations and procedures. Burial of human waste is prohibited except as authorized by the AO.

4. Except as specifically provided, all pumpable solid, liquid, and sludge waste shall be disposed of by injection in accordance with USEPA, ADEC, and the Alaska Oil and Gas Conservation Commission regulations and procedures. On-pad temporary muds and cuttings storage will be allowed as necessary to facilitate annular injection and/or backhaul operations.

5. Wastewater disposal:
   a. Unless authorized by the National Pollution Discharge Elimination System (NPDES) or State permit, disposal of domestic wastewater into bodies of freshwater, including wetlands, is prohibited.
   b. Surface discharge of reserve-pit fluids is prohibited unless authorized by applicable NPDES, ADEC, and NSB permits and approved by the AO.
   c. Disposal of produced waters in upland areas, including wetlands, will be by subsurface-disposal techniques. The AO, in consultation with the ADEC and USEPA, may permit alternate disposal methods, if the lessee demonstrates that subsurface disposal is not feasible or prudent.
   d. Discharge of produced waters into open or ice-covered marine waters less than 33 feet (10 meters) in depth is prohibited. The AO in consultation with ADEC and USEPA may approve discharges into waters greater than 33 feet (10 meters) in depth based on a case-by-case review of environmental factors and consistency with the conditions of a NPDES permit.
   e. Alternate disposal methods will require an NPDES permit certified by the State.

6. Areas of operation shall be left clean of all debris.

7. All spills shall be cleaned up immediately and to the satisfaction of the AO and all agencies with regulatory authority over spills, including the USEPA, ADEC, and the U.S. Coast Guard.

8. Notice of any spill shall be given to the AO as soon as possible. Other Federal, State, and NSB entities shall be notified as required by law.

9. For oil- and gas-related activities, a Hazardous-Materials Emergency-Contingency Plan shall be prepared and implemented prior to transportation, storage, or use of fuel. The plan shall include a set of procedures to ensure prompt response, notification, and cleanup in the event of a hazardous substance spill or threat of a release. Procedures applicable to fuel handling (associated with transportation vehicles) may consist of Best Management Practices approved by the AO. The plan shall include a list of resources available for response (e.g., heavy-equipment operators, spill-cleanup materials or companies), and names and phone numbers of Federal, State, and NSB contacts. Other Federal and State regulations may apply and require additional planning requirements. All staff shall be instructed regarding these procedures.

10. Oil-spill-cleanup materials (absorbents, containment devices, etc.) shall be stored at all fueling points and vehicle-maintenance areas and be carried by field crews on all overland moves, seismic work trains, and similar overland moves by heavy equipment.

11. Lessees shall provide refresher spill-response training to NSB and local community spill-response teams on a yearly basis.

12. Lessees shall plan and conduct a major spill-response field-deployment drill annually.

13. Prior to production and as required by law, lessees shall develop spill prevention and response contingency plans and participate in development and maintenance of the *North Slope Subarea Contingency Plan for Oil and Hazardous Substances Discharges/Releases* for the NPR-A operating area. Planning shall include development and funding of detailed (e.g., 1:26,000 scale) environmental sensitivity index maps for the lessee's operating area and areas outside the lessee's operating area that could be affected by their activities. (The specific area to be mapped shall be defined in the lease agreement and approved by the AO in consultation with appropriate resource agencies). Maps shall be completed in paper copy and geographic information system format in conformance with the latest version of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration's *Environmental Sensitivity Index Guidelines*. Draft and final products shall be peer reviewed and approved by the AO in consultation with appropriate Federal, State, and NSB resource and regulatory agencies.

14. Except during overland moves and seismic operations (see stipulation 24m), fuel, other petroleum products, and other liquid chemicals designated by the AO, whether in excess of 660 gallons in a single tank or in excess of 1,320 gallons in multiple containers, shall be stored within an impermeable lined and diked area capable of containing 110 percent of the stored volume. The liner material shall be compatible with the stored product and capable of remaining impermeable during typical weather extremes expected throughout the storage period. Permanent fueling stations shall be lined or have impermeable protection to prevent fuel migration to the environment due to overfills and spills. The storage area shall be located at least 500 feet from any waterbody with the exception of small caches (up to 210 gallons) for motor boats, float planes, and ski planes.

15. Fuels shall not be stored on the active floodplain of any waterbody. Although fuels may be off-loaded from aircraft on ice, fuels shall not be stored on lake or river ice.

16. Refueling of equipment within 500 feet of the highest high water mark of any waterbody is prohibited with the exception of refueling motor boats, float planes, and ski planes. (See stipulation 24n for restrictions related to overland moves and seismic operations.)

17. All fuel containers, including barrels and propane tanks, shall be marked with the responsible party's name, product type, and year filled or purchased.

Ice Roads and Water Use:

18. The location of winter ice roads shall be offset from year to year to minimize vegetative impacts. The offset shall be greater than or equal to the width of the road.

19. Compaction of snow cover or snow removal from fish-bearing waterbodies shall be prohibited except at approved ice-road crossings.

20. Water withdrawal from rivers and streams during winter is prohibited. Water withdrawal is prohibited during winter from lakes less than 7 feet (2.1 m) deep if they are interconnected with or subject to seasonal flooding by a fish-bearing stream. Water may be withdrawn from isolated lakes that are less than 7 feet (2.1 m) deep that lack connection to or are not subject to seasonal flooding by a fish-bearing stream. After consultation with the appropriate Federal, State, and NSB regulatory and resource agencies, the AO may authorize withdrawals from any lake less than 7 feet (2.1 m) deep, if the proponent demonstrates that no fish exist in the lake.

Generally, water withdrawal drawdown during winter from lakes 7 feet (2.1 m) deep or deeper shall be limited to 15 percent of the estimated free-water volume (i.e., excluding the ice). After consultation with the appropriate Federal, State, and NSB regulatory and resource agencies, the AO may authorize drawdown exceeding 15 percent from a lake greater than 7 feet (2.1 m) deep, if the proponent of the additional drawdown demonstrates that no fish exist in the lake. Operators are encouraged to use new ice-road and ice-pad construction methods, such as using aggregate "chips" shaved from frozen lakes, to decrease water demands, construction time, and impact on fisheries.

21. The AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, may allow water extraction from any lake used by molting geese, if it is determined that the withdrawal is consistent with stipulation 20 and will not adversely affect identified goose-feeding habitat along lakeshore margins. An analysis/demonstration of the hydrologic functions of the lake(s) under review may be required of the lessee by the AO prior to approval of the withdrawal.

22. Except for approved crossings, alteration of the banks of a waterway is prohibited. Waterways include natural features with sufficient water to create riparian (willow) habitat such as rivers, streams, deep and shallow lakes, tundra ponds, and shallow water tracks. Clearing of willows along the riparian zone is prohibited. Movement of equipment through willow stands shall be avoided whenever possible.

Overland Moves and Seismic Work:

23. Seismic work is prohibited within 1,200 feet of any known, long-term cabin or campsite, identified by the AO, without the written permission of the AO. The AO's decision will be informed by the consultation process described in stipulation 61.

24. The following restrictions apply to overland moves, seismic work, and any similar use of heavy equipment (other than actual excavations as part of construction) on unroaded surfaces during the winter season:

    a. Because polar bears are known to den predominantly within 25 miles of the coast, operators shall consult with the Fish and Wildlife Service (FWS) prior to initiating activities in such habitat between October 30 and April 15. Activities are prohibited within 1 mile of known or observed polar bear dens; obtain locations from the FWS, (907) 786-3800. Operators are encouraged to apply for a letter of authorization from the FWS to conduct activities in polar bear denning areas.
    b. Motorized ground-vehicle use will be minimized within the Colville River Raptor, Passerine, and Moose Area LUEA from April 15 through August 5, with the exception that use will be minimized in the vicinity of gyrfalcon nests beginning March 15. Such use will remain ½ mile away from known raptor-nesting sites, unless authorized by the AO. The BLM shall consult with FWS to plan travel routes to minimize disturbance to raptors.
    c. Crossing of waterway courses shall be made using a low-angle approach to avoid disruption of the natural stream or lake bank. Except at approved crossings, operators are encouraged to travel a minimum of 100 feet from overwintering fish streams and lakes.
    d. If snow ramps or snow bridges are used at water crossings for bank protection, the ramps and bridges shall be substantially free of soil and/or debris. Snow bridges shall be removed or breached immediately after use or before spring breakup.
    e. To avoid additional freeze down of deep-water pools harboring overwintering fish, waterways shall be crossed at shallow riffles from point bar to point bar whenever possible.

f. On-the-ground activities shall use low-ground-pressure vehicles such as Rolligons, ARDCO, Trackmaster, Nodwell, or similar types of vehicles. A current list of approved vehicles can be obtained from the AO. Limited use of tractors equipped with wide tracks or "shoes" will be allowed to pull trailers.
g. Bulldozing of tundra, trails, or seismic lines is prohibited. This stipulation, however, does not prohibit the clearing of drifted snow along a trail, seismic line, or in a camp, to the extent that the tundra mat is not disturbed. Snow may be cleared from a waterbody ice surface to prepare an aircraft runway, if approved by the AO in consultation with appropriate Federal, State, and NSB regulatory and resource agencies.
h. To reduce the possibility of ruts, vehicles shall avoid using the same trails for multiple trips unless necessitated by serious safety or superseding environmental concern. This provision does not apply to ice roads (see stipulation 18 above).
i. Ground operations are to begin only after the seasonal frost in the tundra and underlying mineral soils has reached a depth of 12 inches, and the average snow cover is 6 inches deep. The exact date shall be determined by the AO.
j. Ground operations shall cease when the spring melt of snow begins; approximately May 5 in the foothills area where elevations exceed 300 feet, and approximately May 15 in the northern coastal areas. The exact date will be determined by the AO.
k. Seismic activities and overland moves within the Goose Molting LUEA and the Teshekpuk Lake Caribou Habitat LUEA from May 1 through September 30 are prohibited. (Note that this overrides language in stipulation 24j.)
l. To prevent surface disturbance to tundra and other vegetation, tracked vehicles will not execute tight turns by locking one track.
m. Operators shall use best available technology (e.g., self-contained containment systems) or other appropriate spill containment measures, approved by the AO, to prevent fuel migration from fuel or chemical storage areas to the environment due to overfills and spills.
n. Refueling of equipment is prohibited within the active floodplain of any waterbody.

Oil and Gas Exploratory Drilling:

25. From May 1 through September 30, exploratory drilling other than from production pads is prohibited in the Special Caribou Stipulations Area (Fig. II.C.1-1).

26. Exploratory drilling is prohibited within 1,200 feet of any known, long-term cabin or campsite, identified by the AO, without written permission of the AO. The AO's decision will be informed by the consultation process described in stipulation 61.

27. Permanent or gravel oil and gas facilities including roads shall not be constructed during the exploration phase of oil and gas development.

28. Exploratory drilling in river, stream, and lake beds, as determined by the highest high water mark, is prohibited. Exceptions to this stipulation may be authorized by the AO in cases of shallow lakes which freeze to the bottom, do not support significant fish or bird populations, and are hydrologically isolated. Further, such an exception may be granted only if it is environmentally preferable to maintaining the restriction.

Facility Design and Construction:

29. At least 3 years prior to approval of any development plan for leases within the Special Caribou Stipulations Area (see Fig. II.C.1-1), the lessee shall design and implement a study of caribou movement, including historical information regarding the distribution and range use of the Teshekpuk Lake Caribou Herd, as well as maps of caribou trails within the area. Study data may be gathered concurrent with approved seismic and exploration activity. The study design shall be approved by the AO in consultation with the Research and Monitoring Team. The study will include a minimum of 3 years of data to assist in providing the information necessary to determine facility design and location, including pipelines, that will be part of the development plan. Lessees may submit individual plans or they may combine with other lessees in the area to do a joint study. Total study funding by all lessees will not exceed $500,000.

30. Causeways and docks are prohibited in river mouths or deltas. Artificial gravel islands and bottom-founded structures are prohibited in river mouths or active stream channels on river deltas, except as provided in the paragraphs below.

    The BLM discourages the use of continuous-fill causeways. Environmentally preferred alternatives for field development include the use of onshore directional drilling, elevated structures, or buried pipelines. Approved causeways shall be designed, sited, and constructed to prevent significant changes to near shore oceanographic circulation patterns and water-quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedences of water-quality criteria, and must maintain free passage of marine and anadromous fish.

    Causeways, docks, artificial gravel islands, and bottom-founded structures may be permitted if the AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, determines that a causeway or other structure is necessary for field development, and that no feasible and prudent alternative exists. A monitoring program may be required to address the objectives of water quality and free passage of fish. Additional mitigation shall be required where significant deviation from these objectives occurs.

31. Permanent oil and gas surface occupancy, including but not limited to permanent oil and gas facilities, pads, rigs, platforms, gravel roads, airstrips, pipelines, gravel or other material extraction sites, and exploration and delineation drilling facilities are prohibited in the Teshekpuk Lake Surface Protection Area (specifically, T. 13 N., Rs. 3-7 W., U.M.; Secs. 1-6, 8-16, 21-25, 36, T. 13 N., R. 8 W., U.M.; T. 14 N., Rs. 1-2 E. and Rs. 1-8 W., U.M.; Secs. 1-2, 11-14, T. 14 N., R. 9 W., U.M.; T. 15 N., Rs. 2-8 W., U.M.; Secs. 1-3, 7-30, 35-36, T. 15 N., R. 9 W., U.M.; T. 16 N., Rs. 2-8 W., U.M.; Secs. 1-6, 8-17, 21-27, 34-36, T. 16 N., R. 9 W., U.M.; T. 17 N., Rs. 1-9 W., U.M.; and T. 18 N., Rs. 2-8 W., U.M.). No exceptions will be granted to this stipulation.

32. Lessees shall use maximum economically feasible extended-reach drilling for production drilling to minimize the number of pads and the network of roads between pads. New developments shall share facilities with existing development when prudent and technically feasible. All oil and gas facilities, except airstrips, docks, and seawater-treatment plants, will be collocated with drill pads. If possible, airstrips will be integrated with roads. Given the paucity of gravel sites in the planning area and the cost of transporting gravel from outside the planning area, lessees are encouraged to implement gravel-reduction technologies e.g., insulated or pile-supported pads.

33. Within the Special Caribou Stipulations Area (see Fig. II.C.1-1), lessees shall orient linear corridors when laying out oil field developments to address migration and corralling effects and to avoid loops of road and/or pipeline that connect facilities.

34. Lessees shall separate elevated pipelines from roads by a minimum of 500 feet, if feasible. Separating roads from pipelines may not be feasible within narrow land corridors between lakes and where pipe and road converge on a drill pad.

35. To minimize delay or deflection of caribou movements, lessees shall place pipeline on the appropriate side of the road as determined by the AO (depending on general caribou movements in the area).

36. In the Special Caribou Stipulations Area (see Fig. II.C.1-1) and where facilities or terrain may funnel caribou movement, ramps over pipelines, buried pipe, or pipe buried under the road may be required by the AO after consultation with appropriate Federal, State, and NSB regulatory and resource agencies.

37. Aboveground pipelines shall be elevated at least 5 feet, as measured from the ground to the bottom of the pipe, except where the pipeline intersects a road, pad, or a ramp installed to facilitate wildlife passage and subsistence passage and access. The AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, may make an exception if no feasible and prudent means exists to meet the requirement.

38. All crude oil, produced water, seawater, and natural gas pipelines shall be constructed to accommodate the best available technology for detecting corrosion or mechanical defects during routine structural integrity inspections.

39. Permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited within and adjacent to the waterbodies listed below at the distances identified to protect fish and raptor habitat, cultural and paleontological resources, and subsistence and other resource values. Setbacks include the bed of the waterbody and are measured from the bank's highest high water mark.

    a. **Ikpikpuk River:** a ½-mile setback from the bank of the Ikpikpuk River within the planning area (fish, raptors, subsistence, cultural, and paleontological resources).
    b. **Miguakiak River:** a ½-mile setback from each bank of the Miguakiak River (fish and subsistence resources).
    c. **Teshekpuk Lake:** a ½-mile setback from the bank and around the perimeter of Teshekpuk Lake (fish and subsistence resources).
    d. **Fish Creek:** (1) a 3-mile setback from each bank of Fish Creek downstream from Section 31, T11N, R1E; (2) a ½-mile setback from each bank of Fish Creek in and upstream from Section 31, T11N, R1E (fish and subsistence resources).
    e. **Judy Creek:** a ½-mile setback from each bank of Judy Creek extending from the mouth to the confluence of an unnamed tributary in Sec. 8, T8N., R.2W., Umiat Meridian (fish and subsistence resources).
    f. **Colville River:** a 1-mile setback from the western bluff (or bank if there is no bluff) of the Colville River extending the length of the river as described in the Colville River Raptor, Passerine, and Moose LUEA. This restriction does not apply within 1½ mile of the Umiat airstrip (fish, raptor, passerine, moose, paleontological, subsistence, scenic, and recreational resources).

g. **Deep Water Lakes:** a ¼-mile setback around the perimeter of any fish-bearing lake within or partially within the deep lake zone (see Fig. II.B.5) (fish resources). (If the fish-bearing status of the waterbody is unknown, the burden is on the lessee to demonstrate whether fish are present.)
h. **Kikiakrorak River:** a 1-mile setback from each bluff (or bank if there is no bluff) of the Kikiakrorak River downstream from T.2 N, R. 4 W., Umiat Meridian (raptor, passerine, and moose resources).
i. **Kogosukruk River:** a 1-mile setback from each bluff (or bank if there is no bluff) of the Kogosukruk River (including the four tributaries off the southern bank) downstream from T.2 N., R.3W., Umiat Meridian (raptor, passerine, and moose resources).

On a case-by-case basis, essential pipeline and road crossings will be permitted, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, through setback areas in those instances where no other suitable sites are available. Stream crossings will be sited perpendicular to the main channel flow; lake crossings will be at the narrowest point. Pipeline and road crossings are prohibited in the setback around Teshekpuk Lake, with no exceptions. Road crossings are prohibited in the setback adjacent to the Colville River with no exceptions.

40. Gravel mining sites required for development activities will be restricted to the minimum necessary to develop the field efficiently and with minimal environmental damage. Where feasible and prudent, gravel sites shall be designed and constructed to function as water reservoirs for future use. Gravel mine sites are prohibited within the active floodplain of a river, stream, or lake unless the AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, determines that there is no feasible and prudent alternative or that a floodplain site would enhance fish and wildlife habitat after mining operations are completed and the site is closed.

    Mine site development and rehabilitation within a floodplain shall follow the procedures outlined in McLean (1993), North Slope Gravel Pit Performance Guidelines; State of Alaska, Dept. of Fish and Game (ADF&G) Habitat and Restoration Division Technical Report 93-9.

41. For those waterbodies not listed in stipulation 39, permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited upon or within 500 feet as measured from the highest high water mark of the active floodplain. Essential pipeline and road crossings will be permitted on a case-by-case basis.

42. Bridges, rather than culverts, shall be used for any allowed road crossings on all major rivers, including those waterbodies listed in stipulation 39 or identified by the AO in consultation with appropriate Federal, State, and NSB regulatory and resource agencies, to reduce the potential of ice-jam flooding and erosion. When necessary on smaller streams, culverts shall be large enough to avoid restriction of fish passage or adversely affecting natural stream flow.

43. The natural drainage pattern will be identified prior to and maintained during and after construction. All permanent structures constructed adjacent to a body of water, such as approved road and pipeline crossings, shall be sited and designed to limit erosion from flooding and wave action (e.g., through use of slope-protection measures). Cross-drainage structures will be sited, maintained, and properly abandoned to prevent impoundments or alteration of local or areawide hydrology. Gravel structures shall be designed and sited to minimize the length that is perpendicular to sheet flow.

44. Dewatering during construction shall be conducted using Best Management Practices (BMP's). A current list of BMP's will be available from the AO. Examples include the use of splash plates, dewatering points, natural filtration through vegetation, and dewatering during low-water period.

45. No surface structures, except essential transportation crossings, are allowed within the Pik Dunes LUEA.

46. Lessees shall minimize the impact of industrial development on key wetlands. Key wetlands are those wetlands that are important to fish, waterfowl, and shorebirds because of their high value or scarcity in the region. Lessees shall identify on a map or aerial photograph the largest surface area, including future expansion areas, within which a facility is to be sited or an activity is to occur. The AO will consult with Federal, State, and NSB regulatory and resource agencies to identify key wetlands and work with lessees during the development of operating plans. To minimize impact, the lessee shall avoid siting facilities in the identified wetlands, unless no feasible and prudent alternative exists. Key wetland types include but are not limited to fish-bearing lakes and streams, riparian shrub, and the following classes described by Bergman et al. (1977): shallow and deep-*Arctophila* ponds, deep-open lakes, basin-complex wetlands, and coastal wetlands.

47. Permanent oil and gas facilities are prohibited within 1 mile of known long-term cabins or long-term campsites, identified by the AO, except that pipelines and roads are allowed up to ¼ mile from such cabins or campsites. The AO's decision will be informed by the consultation process described in stipulation 61.

48. Permanent roads (i.e. gravel, sand) connecting to a road system or docks outside the planning area are prohibited, and no exceptions may be granted. Permanent roads necessary to connect pads within independent, remote oil fields are allowed but they must be designed and constructed to create minimal environmental impacts. Roads connecting production sites between separate oil fields may be considered if road-connected operations are environmentally preferable to independent, consolidated operations that each include airstrip, housing, production, and support facilities. This exception will only be granted following consultations with appropriate Federal, State, and NSB regulatory and resources agencies, and the appropriate level of NEPA review.

Ground Transportation:

49. The following ground-traffic restrictions apply to permanent roads (as authorized in stipulation 48 above) in the Special Caribou Stipulations Area (Fig. II.C.1-1):

    a. From May 20 through June 20:
        (1) Traffic speed will not exceed 15 miles per hour.
        (2) Traffic will be minimized (a reasonable target would be four convoy round-trips per day between facilities). Nonessential operations requiring vehicles shall be suspended during this time period.
    b. From May 20 through August 1:
        (1) Caribou movement will be monitored.
        (2) Based on this monitoring, traffic will cease when a crossing by 10 or more caribou appears to be imminent.

c. From May 20 through August 20:
   (1) Convoying will be used to minimize the number of disturbances due to road traffic.
   (2) Personnel will be bussed between work sites and other facilities to minimize the number of vehicles on the road.

50. Major stockpiling of equipment, materials, and supplies for oil and gas activities in the Special Caribou Stipulations Area (see Fig. II.C.1-1) shall occur prior to or after the period May 20 through June 20 to minimize road traffic during that period.

51. Chasing wildlife with ground vehicles is prohibited.

Air Traffic:

(Note: The BLM's authority to restrict air traffic is limited to those activities associated with use authorization on BLM-administered lands.)

52. Use of aircraft larger than a Twin Otter for authorized activities in the planning area, including oil and gas activities, from May 20 through August 20 within the Teshekpuk Lake Caribou LUEA (see Fig. II.B.4) is prohibited, except in cases of emergency.

53. Helicopter overflights for BLM-permitted activities shall be suspended in the Goose Molting LUEA (see Fig. II.B.2) from June 15 through August 20.

54. Fixed-wing aircraft traffic takeoffs and landing for BLM-permitted activities in the planning area shall be limited to an average of one round-trip flight a day from May 20 through June 20 at aircraft facilities in the Teshekpuk Lake Caribou Habitat LUEA (see Fig. II.B.4). Within the Goose Molting LUEA (see Fig. II.B.2), fixed-wing aircraft use for such activities shall be restricted from June 15 to August 20 to flight corridors and frequencies established by BLM in consultation with the appropriate Federal, State, and NSB regulatory and resource agencies.

55. Aircraft shall maintain an altitude of at least 1,000 feet above ground level (AGL) (except for takeoffs and landings) over caribou winter ranges from October 1 through May 15 and 2,000 feet AGL over the Teshekpuk Lake Caribou Habitat LUEA (see Fig. II.B.4) from May 16 through July 31, unless doing so would endanger human life or violate safe flying practices.

56. Aircraft shall maintain an altitude of at least 1,500 feet AGL when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 5, unless doing so would endanger human life or violate safe flying practices. Aircraft shall maintain an altitude of 1,500 feet AGL when within ½ mile of known gyrfalcon nest sites from March 15 to April 15. Permittees shall obtain information from BLM necessary to plan flight routes near gyrfalcon nests.

57. Hazing of wildlife by aircraft is prohibited.

Oil Field Abandonment:

58. Upon field abandonment or expiration of a lease or oil- and gas-related permit, all facilities shall be removed and sites rehabilitated to the satisfaction of the AO, in consultation with appropriate Federal, State, and NSB regulatory and resource agencies. The AO may determine that it is in the best interest of the public to retain some or all of the facilities. Lessees shall comply with all exploration and development bonding required by law and regulation (43 CFR 3154.1 and 3134.1). No exceptions shall be granted to this provision.

Subsistence:

59. During exploration, development, and production, the lessee shall develop and implement a plan, approved by the AO in consultation with the Research and Monitoring Team and the Subsistence Advisory Panel, to monitor the effects of activities on subsistence. The lessee shall provide biannual reports to BLM, the Research and Monitoring Team, and the Subsistence Advisory Panel.

60. Lessees shall not unreasonably restrict access by subsistence users in oil field development areas.

    a. Lessees shall establish procedures for entrance to facilities, the use of roads, and firearms discharge. These procedures shall be developed in consultation with affected local communities, NSB, and the Subsistence Advisory Panel and be approved by the AO. In cases where the lessee and the Panel disagree, the AO will determine the appropriate procedure.
    b. Lessees shall develop and distribute information about how to conduct subsistence activities in development areas safely (so equipment is not damaged and people are not endangered) to the communities through public meetings, newsletters, radio, and signs in both English and Inupiaq.

61. Exploration and development and production operations shall be conducted in a manner that prevents unreasonable conflicts between the oil and gas industry and subsistence activities.

    Prior to submitting an exploration plan or development and production plan (including associated oil-spill contingency plans) to the BLM, the lessee shall consult with potentially affected subsistence communities (e.g., Barrow, Nuiqsut, Atqasuk, or Anaktuvuk Pass), NSB, and the Subsistence Advisory Panel to discuss potential conflicts with the siting, timing, and methods of proposed operations and safeguards or mitigating measures that could be implemented by the operator to prevent unreasonable conflicts. Through this consultation, the lessee shall make every reasonable effort, including such mechanisms as a conflict avoidance agreement, to ensure that exploration, development, and production activities are compatible with subsistence hunting, fishing, and other subsistence activities and will not result in unreasonable interference with subsistence harvests.

    A discussion of resolutions reached during this consultation process, specific conflict avoidance agreement(s), and plans for continued consultation shall be included in the permit application, exploration plan, or the development and production plan. In particular, the lessee shall show in the plan how its activities, in combination with other activities in the area, will be scheduled and located to prevent unreasonable conflicts with subsistence activities. Lessees also shall include a discussion of multiple or simultaneous operations, such as exploration and delineation well drilling and seismic activities, that can be expected to occur during operations to more accurately assess the potential for any cumulative effects. Communities, individuals, and other entities who were involved in the consultation shall be identified in the application or plan. The AO shall send a copy of the exploration plan or development and production plan

(including associated oil-spill-contingency plans) to the potentially affected communities, the NSB, and the Subsistence Advisory Panel at the time they are submitted to the BLM to allow concurrent review and comment as part of the plan approval process.

In the event no agreement is reached between the parties, the AO shall consult with representatives from the subsistence communities, Subsistence Advisory Panel, NSB, and the lessee(s) to specifically address the conflict and attempt to resolve the issues before making a final determination on the adequacy of the measures taken to prevent unreasonable conflicts with subsistence harvests.

The lessee shall notify the AO of all concerns expressed by subsistence users during operations and of steps taken to address such concerns. Lease-related use will be restricted, when the AO determines it is necessary to prevent unreasonable conflicts with local subsistence hunting, fishing, and other subsistence activities.

In enforcing this stipulation, the AO will work with other agencies and the public to assure that potential conflicts are identified and efforts are taken to avoid these conflicts, e.g., planning seismic operations to avoid traditional land use sites and allotments. These efforts may include seasonal drilling restrictions, seismic restrictions, and directional drilling requirements or use of other technologies deemed appropriate by the AO.

The consultation process described in this stipulation will also be required of applicants for geophysical (i.e. seismic) permits to address potential conflicts with the setback requirements for cabins and campsites described in stipulation 23. This consultation will help provide information to the AO on the advisability of modifying or waiving the restriction on seismic activity identified in stipulation 23.

62. The following subsistence, wildlife habitat, and traditional/cultural land use areas are of significant concern to local communities and will be given special consideration during the consultation process outlined in stipulation 61:

    a. **Long-term cabins and campsites:** a 2-mile zone around the cabins and campsites.
    b. **Ikpikpuk River:** a 2-mile zone from the east bank of the river.
    c. **Miguakiak River:** a 3-mile zone from each bank of the river.
    d. **Fish Creek:** (1) a 3-mile zone from each bank downstream from Sec. 31. T11N, R1E; (2) a 2-mile zone from each bank in and upstream from Section 31, T11N, R1E.
    e. **Judy Creek:** a 2-mile zone from each bank of the creek.
    f. **Kogosukruk River:** a 2-mile zone from each bluff (or bank if there is no bluff) of the river (including the four tributaries off the southern bank) downstream from T. 2 N., R. 3 W., Umiat Meridian.
    g. **Kikiakrorak River:** a 2-mile zone from each bluff (or bank if there is no bluff) of the river downstream from T.2 N, R. 4 W., Umiat Meridian.
    h. **Colville River:** a 2-mile zone from the west bluff (or bank if there is no bluff) extending the length of river in the Colville River Raptor, Passerine, and Moose LUEA.

    In addition, a permittee or lessee engaged in oil and gas-related activity shall consult with the BLM, FWS, ADF&G, and the NSB regarding wildlife concerns prior to submitting a geophysical (i.e. seismic) permit, exploration plan, or development and production plan involving activity within the 2-mile zones around the Kogosukruk (and its tributaries), Kikiakrorak, and Colville Rivers described above. In the event that the permittee or lessee and the agencies are unable to reach agreement on steps necessary to address wildlife

concerns, the AO will consult with the other agencies and the permittee or lessee before making a determination on the adequacy of the measures taken to prevent conflicts with wildlife.

Orientation Program:

63. The lessee shall include in any application for permit to drill a proposed orientation program for all personnel involved in exploration or development and production activities (including personnel of lessee's agents, contractors, and subcontractors) for review and approval by the AO. The program shall be designed in sufficient detail to inform individuals working on the project of specific types of environmental, social, and cultural concerns that relate to the planning area. The program shall address the importance of not disturbing archaeological and biological resources and habitats, including endangered species, fisheries, bird colonies, and marine mammals and provide guidance on how to avoid disturbance. Guidance shall include the production and distribution of information cards on endangered and/or threatened species in the planning area. The program shall be designed to increase sensitivity and understanding of personnel to community values, customs, and lifestyles in areas in which personnel will be operating. The orientation program shall also include information concerning avoidance of conflicts with subsistence, commercial fishing activities, and pertinent mitigation.

    The program shall be attended at least once a year by all personnel involved in on-site exploration or development and production activities (including personnel of lessee's agents, contractors, and subcontractors) and all supervisory and managerial personnel involved in lease activities of the lessee and its agents, contractors, and subcontractors. Individual training is transferable from one facility to another except for elements of the training specific to a particular site.

    Lessees shall maintain a record onsite of all personnel who attend the program for so long as the site is active, though not to exceed the 5 most recent years of operations. This record shall include the name and dates(s) of attendance of each attendee.

Traditional Land Use Sites:

64. Lessees shall conduct an inventory of known traditional land use sites prior to any field activity. This inventory will be compiled from sites listed in the most current Traditional Land Use Inventory available from the NSB's Inupiat History, Language, and Cultural Commission, and shall be approved by the AO. Based on this inventory, the lessee shall develop a plan to avoid these sites and mitigate any potential damage that could result from field activities. The plan shall indicate how access to the site by local subsistence users will be provided. Lessees shall submit copies of the plan to BLM and the Subsistence Advisory Panel with any application for permit to drill.

Other Activities:

65. It is the responsibility of the authorized user to ensure that all individuals brought to the planning area under its auspices adhere to these stipulations. Authorized users of the planning area shall provide all employees, contractors, subcontractors, and clients with a briefing regarding stipulations applicable to the lease and/or permit. A copy of applicable stipulations will be posted in a conspicuous place in each work site and campsite.

66. The authorized user shall protect all survey monuments and be responsible for survey costs if remonumentation is required as a result of the user's actions.

67. All activities shall be conducted to avoid or minimize disturbance to vegetation.

68. The BLM, through the AO, reserves the right to impose closure of any area to operators in periods when fire danger or other dangers to natural resources are severe.

69. The authorized user shall be financially responsible for any damage done by a wildfire caused by its operations.

70. Construction camps are prohibited on frozen lakes and river ice. Siting of construction camps on river sand and gravel bars is allowed and, where feasible, encouraged. Where leveling of trailers or modules is required and the surface has a vegetative mat, leveling shall be accomplished through blocking rather than use of a bulldozer.

71. Use of pesticides without the specific authority of the AO is prohibited.

72. The feeding of wildlife by authorized users is prohibited.

73. Hunting and trapping by lessee's employees, agents, and contractors are prohibited when persons are on "work status." Work status is defined as the period during which an individual is under the control and supervision of an employer. Work status is terminated when the individual's shift ends and he/she returns to a public airport (e.g., Fairbanks, Barrow, Nuiqsut, or Deadhorse). Use of lessee facilities, equipment, or transport for personnel access or aid in hunting and trapping is prohibited.

74. Lessees shall conduct a cultural and paleontological resources survey prior to any ground-disturbing activity. Upon finding any potential cultural or paleontological resource, the lessee or their designated representative shall notify the AO and suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the AO.

75. Petroleum exploration and production activities are prohibited within ½ mile of occupied grizzly bear dens, identified by the ADF&G, unless alternative mitigation measures are approved by the AO in consultation with appropriate Federal, State, and NSB regulatory and resource agencies.

76. Oil and gas lessees and their contractors and subcontractors will prepare and implement bear-interaction plans to minimize conflicts between bears and humans. These plans shall include measures to: (a) minimize attraction of bears to the drill sites; (b) organize layout of buildings and work areas to minimize human/bear interactions; (c) warn personnel of bears near or on drill sites and identify proper procedures to be followed; (d) if authorized, deter bears from the drill site; (e) provide contingencies in the event bears do not leave the site or cannot be deterred by authorized personnel; (f) discuss proper storage and disposal of materials that may be toxic to bears; and (g) provide a systematic record of bears on the site and in the immediate area. The lessee's shall develop educational programs and camp layout and management plans as they prepare their lease operations plans. These plans shall be developed in consultation with appropriate Federal, State, and NSB regulatory and resource agencies and submitted to the AO.

77. Operators are encouraged to apply for a letter of authorization from the FWS to conduct activities in polar bear denning areas.

78. Permanent structures, other than oil and gas facilities, are prohibited within 100 feet of the highest high water mark of the nearest body of water.

79. Lessees shall use smokeless flares for handling routine conditions and use auxiliary smokeless flares for planned events that exceed the capacity of routine flares. Lessees shall use flares that meet the Federal New Source Performance design standards listed in 40 CFR 60.18.