

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

National Petroleum Reserve - Alaska, Oil and Gas Lease Sale 2018

AGENCY: Bureau of Land Management, Alaska State Office

ACTION: Detailed Statement of the Sale

1. Authority.

The Bureau of Land Management (BLM) is issuing this National Petroleum Reserve-Alaska (NPR-A) Detailed Statement of the Sale (DSS) under the authority of the Department of the Interior Appropriations Act (P.L. 96-514); the Naval Petroleum Reserves Production Act (NPRPA) of 1976 [42 U.S.C. 6501 et seq.], as amended; the Federal Land Policy and Management Act (FLPMA) of 1976 [43 U.S.C. 1701 et. seq.], as amended; and the regulations in Title 43 of the Code of Federal Regulations (CFR) Part 3130. Pursuant to 43 CFR Subpart 3131.4-1(a), a Notice of Sale must be published in the *Federal Register* at least 30 days prior to December 12, 2018, the scheduled date of sale. Pursuant to 43 CFR Subpart 3131.4-1(c), the DSS must be available to the public on the same day as the *Federal Register* notice is published. The DSS is available on the BLM website at: <http://www.blm.gov/alaska>.

The tracts described in this DSS are being offered for competitive oil and gas lease by sealed bid to the highest qualified bidder. The United States reserves the right to withdraw any tract from this sale anytime prior to issuance. Also reserved is the right to reject any and all bids received for any tract, regardless of the amount offered. The Locator Map and description of tracts being offered are provided in the Exhibits of this DSS.

The Record of Decision (ROD) for the NPR-A was signed by Secretary of the Interior Ken Salazar on February 21, 2013. The tracts being offered in this sale are subject to stipulations and best management practices established by the ROD. Tracts in the Colville River Special Management Area are subject to the Colville River Special Area (CRSA) protection measures established by the Decision Record for the Colville River Special Area Management Plan (CRSAMP). The tracts offered are listed in Exhibit B. Stipulations and BMPs are in Exhibit C. Protection measures applicable to the CRSA are in Exhibit D. Tracts affected by the site-specific K stipulations and protection measures, applicable to the CRSA are identified in the tract descriptions in Exhibit B and by reference designation, such as "K-1(a), Protections 1 thru 9". Exhibit B is based on the BLM's current mapping. Stipulations and CRSA protection measures apply to all leases as appropriate based upon mapping current at the time of application for BLM authorization for post-leasing activity.

2. Minimum Bid, Yearly Rental, and Royalty System.

The lands described herein are offered for competitive oil and gas lease sale by sealed bid to the qualified bidder submitting the highest cash bonus bid in accordance with the statutory and regulatory authorities cited above. The minimum bid, yearly rental, and royalty rate that apply to this sale are specified below.

The minimum bid amount stated below is the minimum amount acceptable to be considered a valid bid. To ensure that the Government receives fair market value for the conveyance of lease rights in this sale, each Tract receiving a bid will be evaluated to determine its fair market value. Any bid which does not meet or exceed the fair market value may be rejected.

Leases issued as a result of this sale will have primary terms of ten (10) years.

Variable	High Potential Tracts	Low Potential Tracts
Tract Size	¼ township (± 5,760 acres)	½ township (± 11, 500 acres)
Minimum Bid	\$25.00 or more per acre or fraction thereof	\$5.00 or more per acre or fraction thereof
Fixed Royalty Rate	16 2/3 percent	12 ½ percent
Rental Rate and Minimum Royalty	\$5.00 per acre or fraction thereof	\$3.00 per acre or fraction thereof

3. Acreage and Land Status.

The acreage shown above is only a general approximation. The acreage for each tract is shown on Exhibit B. The successful bidders will be advised of any required adjustments (additional payments or refunds) to the advanced rental payments prior to lease issuance. High bonus bids will be based on the highest bid per tract, and will not be affected by such acreage adjustments. Most of the tracts will be free of encumbrances, but some are affected by conveyances to Native Allottees, Village or Regional Native Corporations, or by Air Navigation Sites or other surface ownership or uses which may restrict surface access.

4. Split Estate Tracts.

The lessee has a right to access so much of the surface as is reasonably necessary to explore and develop the lease but will be responsible for negotiating any surface use and access issues with the surface owner or managing surface agency for split-estate lands. For Certified Native Allotments, the lessee must also obtain approval from the Bureau of Indian Affairs. If a bidder wants to review the land status of particular tracts prior to bidding, details for obtaining the pertinent status plats are found at paragraph 9.

5. Filing of Bids.

Bidders must comply with the following requirements. Times specified hereafter are Alaska Standard Time.

- a) No bid will be accepted for less than an entire tract as described in Exhibit B. For each tract bid upon, a bidder must submit a separate signed bid in a sealed envelope labeled "Sealed Bid for NPR-A Oil and Gas Lease Sale Tract No. 2018-(alpha-numeric designation or alpha-alpha, as appropriate, e.g. 2018-H-000, 2018-L-000, 2018-000 or S-000, and not to be opened until 10:00 a.m., December 12, 2018. **The total amount bid must be in a whole dollar amount (U.S. dollars);** any cent amount above the whole dollar will be ignored by the BLM. Details of the information required on the bid(s) and the bid envelope(s) are specified in the document "Bid Form and Envelope" contained in the DSS as Exhibit E.

Each bid must be accompanied by a bid deposit of 1/5th of the bonus bid amount in U.S. currency or by cashier's check, bank draft, or certified check, payable to the Department of the Interior, Bureau of Land Management. This deposit will be forfeited if a bidder, after being determined the highest qualified bidder, fails to sign the lease or otherwise comply with applicable regulations.

Bidders submitting joint bids must state on the bid form (Exhibit E) the proportionate interest of each participating bidder, in percent to a maximum of five decimal places, e.g., 33.33333 percent. The BLM may require bidders to submit other documents in accordance with 43 CFR Part 3130. The BLM warns bidders against violation of 18 U.S.C. 1860 prohibiting unlawful combination or intimidation of bidders. In accordance with 43 CFR Subpart 3132.5(b), "The United States reserves the right to reject any and all bids received for any tract, regardless of the amount offered."

Submission of a bid constitutes certification of compliance with the regulations found in 43 CFR Part 3130. Anyone seeking to acquire a Federal oil and gas lease may be required to submit additional information to show compliance with the regulations. A statement to this effect must be included on each bid (see the document "Bid Form and Envelope" contained in the DSS as Exhibit E).

Bidders also need to submit with their bids a "Bidder Contact Form" (Exhibit F) which identifies contact information relative to the bids. **This form must not be included in a bid envelope but be submitted with the bids.**

- b) Sealed bids must be received by the BLM Alaska State Office, 222 West 7th Avenue #13, Anchorage, Alaska 99513-7504, during normal business hours (8 a.m. to 4:00 p.m.) until the Bid Submission Deadline at 4:00 p.m., December 10, 2018. If bids are received later than the time and date specified above, they will be returned unopened to the bidders. Bidders may not modify or withdraw their bids unless the BLM receives a written modification or written withdrawal request prior to 4:00 pm December 10, 2018.

- c) Bid Opening. The public opening and reading of the bids for the 2018 NPR-A oil and gas lease sale will be available for public viewing on BLM's website via video live streaming at www.blm.gov/live. The venue will not be open to the general public, media, or industry.
- d) Natural Disasters. In the event of a natural disaster, the Alaska State Office may extend the bid submission deadline. Bidders may call (907) 271-5960 for information about the possible extension of the bid submission deadline due to such an event.
- e) Tied Bids. In the event the highest bids are tie bids, the tying bidders are allowed to submit on or before 4:00 p.m., January 12, 2019, additional sealed bids to break the tie. The additional bids must include any additional amount necessary to bring the amount tendered with his/her bid to 1/5th of the additional bid. Additional bids to break the tie will be opened on January 12, 2019, for public viewing on BLM's website via video live streaming at www.blm.gov/live. The venue will not be open to the general public, media, or industry. The opening of the tied bids are for the sole purpose of publicly announcing and recording the tied bids received, and no bids will be accepted or rejected at that time.

If tie breaking bids are received later than the time and date specified above, they will be returned unopened to the bidders. Bidders may not modify or withdraw their additional bids unless the BLM receives a written modification or written withdrawal request prior to 4:00 p.m. January 12, 2019.

6. Deposit of Payment.

Any payments made in accordance with paragraph 5(b) will be deposited by the Government in a non-interest-bearing account during the period the bids are being considered. Such a deposit does not constitute and shall not be construed as acceptance of any bid on behalf of the United States.

7. Acceptance, Rejection, or Return of Bids.

No lease for any tract will be awarded to any bidder, unless:

- a) The bidder has complied with all requirements of this DSS, including the requirements listed on documents contained therein, and the applicable regulations;
- b) The bid is the highest valid bid; and

No bid will be considered for acceptance unless it provides for a cash bonus as specified in Paragraph 2. Any bid submitted which does not conform to the requirements of this DSS, the laws, and regulations cited in paragraph 1 of this DSS, and other applicable regulations may be returned to the person submitting that bid by the BLM and not considered for acceptance.

8. Successful Bidders.

The following requirements apply to successful bidders in this sale:

- a) **Lease Issuance.** The BLM will require each person who has submitted a bid accepted by the AO to execute copies of lease Form AK-3130-1 (sample) shown in Exhibit I of this DSS, pay the balance of the bonus bid along with the first year's annual rental, and the lease processing fee for each lease issued in accordance with the requirements of 43 CFR Subpart 3132.3, and satisfy the bonding requirements of 43 CFR Subpart 3134.
- b) **Who May Hold Leases.** In accordance with 43 CFR Subpart 3132.1, leases issued may be held only by the following:
 - (1) Citizens and nationals of the United States;
 - (2) Aliens lawfully admitted for permanent residence in the United States as defined in 8 U.S.C. 1101(a)(20);
 - (3) Private, public or municipal corporations organized under the laws of the United States or of any State or of the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, or any of its territories; or
 - (4) Associations of such citizens, nationals, resident aliens or private, public, or municipal corporations.
- c) **Bonding Requirements.** Prior to issuance of a lease, an individual lease surety or personal bond must be furnished to the AO in the sum of \$100,000 conditioned on compliance with all the lease terms, including rentals and royalties, and stipulations. An individual lease bond will not be required if a bidder already maintains or furnishes an NPR-A-wide bond in the sum of \$300,000 conditioned on compliance with the terms, conditions, and stipulations of all oil and gas leases held by the bidder within the NPR-A, or maintains or furnishes a nationwide bond and furnishes a rider thereto sufficient to bring total coverage to \$300,000 and extending coverage to all of the bidder's oil and gas leases within the NPR-A. A copy of the bond form is included in the DSS as Exhibit G. See Exhibit H for the Geophysical Exploration Rider Form for Use with NPR-A –wide bonds.

9. Description of the Areas Offered for Bids.

Areas Available for Leasing. Land status data regarding tracts offered for lease may be found on the official Master Title Plats (MTPs) available for review in the BLM Public Information Center located on the first floor of the Federal Building and Courthouse, 222 West 7th Avenue, #13, Anchorage, Alaska 99513-7504. MTPs are also available on the BLM website at: <http://sdms.ak.blm.gov/sdms/>. These tracts are shown on the Locator Map of Exhibit A and are described in detail in Exhibit B of this DSS.

10. Lease Terms and Stipulations.

- a) Leases resulting from this sale will have initial terms of 10 years. A sample of the lease form is available as Exhibit I of this DSS.
- b) The applicability of general and special lease stipulations and best management practices are explained in Exhibit C. The applicability of additional protection measures for the Colville River Special Management Area (CRSAMP) is explained in the CRSAMP (Exhibit D) for the CRSA. The standard stipulations will become a part of all leases. The special stipulations and protection measures affecting each tract are identified in the tracts offered description on Exhibit B will become a part of the leases for those tracts.

11. Information to Lessees.

- a) The ROD established Best Management Practices (BMPS) for NPR-A. These are pre-application requirements, procedures, management practices, or design features that BLM has adopted as operational requirements. These requirements will be addressed through the permitting process. An oil and gas lease does not in itself authorize any on-the-ground activity. Seismic operations, drilling, ice road construction, pipeline construction, etc. require additional land use authorizations. Any applicant requesting such authorization will have to address the required operating procedures either before submitting the application (e.g., subsistence consultation, brant surveys) or as part of the application proposal (e.g., proposal states garbage will not be buried, or pipelines and roads will be separated by 500 ft or more). Requirements that are met prior to submission of the application, as well as procedures, practices, and design features that are an integral part of a proposal, do not need to be stipulated in a permit or lease. Because BMPs are operational requirements and not lease stipulations, their applicability goes beyond oil and gas leasing to any permitted activity where the requirement is relevant.

The AO may add more restrictive stipulations as determined necessary under the authority of the National Environmental Policy Act (NEPA) [42 U.S.C. 4321 et seq.] by further NEPA analysis and as developed through consultation with federal, state, and North Slope Borough (NSB) regulatory and resource agencies. Laws or regulations may require other federal, state, and NSB permits (e.g., Clean Water Act [CWA] Section 404) for an oil and gas project to proceed. Specific state permits are required when the state has authority, under federal or state law or regulation, to enforce the provision in question. Specific permits issued by federal agencies other than BLM could include permit conditions that are more stringent than those identified in the ROD.

The Stipulations and BMPs for the planning area are available in Exhibit C: Appendix A of the ROD. A detailed discussion of BMPs is in the ROD's Appendix A.

- b) Colville River Special Area Management Plan (CRSAMP). On July 18, 2008, the CRSAMP Decision Record was signed. This Decision authorized the implementation of the CRSAMP Proposed Action as outlined in the CRSAMP environmental analysis (EA).

The BLM conducted an EA (EA Number AK-023-08-01) to evaluate the effects of implementation of the CRSAMP. The CRSAMP provides additional protections for the

Arctic peregrine falcon. Additional indirect benefits to other birds, moose, fish, and fish habitat, and subsistence may occur. This action is in conformance with multiple management objectives of the NPR-A. Additional management actions for the CRSAMP were developed from the NPR-A Raptor Workshop. The final action complies with all laws, regulations, and policies. The final action "Protection Measures 1 thru 9" is found in Section 2.1 of the CRSAMP. The CRSAMP Decision Record and Table 2-1 (Protection Measures 1 thru 9) have been provided herein as Exhibit D of this DSS.

- c) Energy Policy Act of 2005. On August 8, 2005, the Energy Policy Act of 2005 was signed into law. The BLM has issued a final regulation, codified at 43 CFR Part 3130, effective March 5, 2008, implemented the change in lease terms mandated by the Act. The change in lease terms mandated by the Act will be applicable to all leases issued through this lease sale.
- d) Conservation of Surface Values for NPR-A Planning Area Land. The lessee, his agents, contractors, subcontractors, and operators (hereafter referred to as "Lessee") will operate within the resource management policy of the BLM. This policy is outlined in the NPRPA and the FLPMA which states that ". . . public lands will be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources, and archeological values that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use" The Lessee will be required to protect these identified resource values and to operate in a manner which minimizes environmental impacts to physical, biological, cultural and aesthetic resources. Areas requiring special protection are identified by the NPR-A ROD. In this regard, the NPRPA also provides "Any exploration within the Utukok River, the Teshekpuk Lake areas, and other areas designated by the Secretary of the Interior containing any significant subsistence, recreational, fish and wildlife, or historical or scenic value, shall be conducted in a manner which will assure the maximum protection of such surface values to the extent consistent with the requirements of this Act for the exploration of the reserve. (42 U.S.C. 6504(a)). These requirements apply to both exploration and production under this lease sale (42 U.S.C. 6506a). Operational procedures designed to protect resource values will be developed during Surface Use Plan preparation, and additional protective measures may be required beyond the general and special stipulations identified in the above-referenced documents.

Prior to entry upon the NPR-A for purposes of conducting geophysical operations, the Lessee shall obtain a permit authorizing specific geophysical exploration activities from the BLM Fairbanks District Office. Such permit shall provide for conditions, restrictions, and prohibitions as the AO deems necessary or appropriate to mitigate reasonably foreseeable and significant adverse effects upon the surface resources, including bonding for geophysical activities not covered by a lease bond, NPR-A-wide bond, or Nationwide bond with NPR-A and geophysical exploration riders.

The Lessee shall comply with all federal laws and regulations, including rules and regulations of the Secretary of Health and Human Services, the Environmental Protection Agency, and with state and local laws and codes governing the emission or discharge of pollutants from activities which are embraced in the lease permit. Surface disturbing activities may be prohibited during muddy and/or wet soil periods. This limitation does not apply to operations and maintenance of producing wells using authorized roads. During periods of adverse

weather conditions, all activities creating irreparable impacts may be suspended. The lessee is advised that conducting activities related to leases issued as a result of this lease sale will be subject to 43 CFR Part 3130 and 43 CFR Part 3160 and to the provisions of the Onshore Oil and Gas Order No. 1. BLM will add such site specific stipulations derived from the Environmental Assessment / Environmental Impact Statement and the associated field examination, as necessary, to ensure conservation of resource values. These will be in addition to stipulations attached to and made a part of each oil and gas lease.

- e) Other Permits. The Lessee is responsible for obtaining all required federal, state, local, or private permits and authorizations prior to commencing any operations.
- f) Gravel Extraction. The oil and gas lease does not entitle the Lessee to NPR-A gravel resources. Use of federal gravel resources must be in compliance with BLM regulations, which require, among other things, that a mineral material sale contract be obtained from the appropriate office (Arctic District Office) for the purpose of gravel extraction and use. Use of sand and gravel from Certified Native Allotments must be arranged with the allottee and the Bureau of Indian Affairs. The Lessee is advised that gravel is basically a scarce commodity within the Reserve, so conservation of gravel is of utmost concern.
- g) Endangered Species Act Section 7 Consultation Stipulation. The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such species or their habitat. The BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. The BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. §1531 et seq., including completion of any required procedure for conference or consultation.
- h) Cultural Resources and Tribal Consultation Stipulation. This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007, or other statutes and executive orders. The BLM will not approve any ground-disturbing activities that may affect any such properties or resources until it completes its obligations (e.g., State Historic Preservation Officer (SHPO) and tribal consultation) under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized, or mitigated.

- i) Equal Employment Opportunity. The Lessee is advised that, during the period of operations within NPR-A, the Lessee will ensure equal employment opportunity consistent with the authority contained in Section 10 of the Oil and Gas Lease Form.
- j) The Record of Decision for the "Supplemental Environmental Impact Statement for the Alpine Satellite Development Plan for the Proposed Greater Mooses Tooth One Development Project". The Record of Decision for the "Supplemental Environmental Impact Statement for the Alpine Satellite Development Plan for the Proposed Greater Mooses Tooth One Development Project" (GMT1) of February, 2015 will establish a "Regional Mitigation Strategy" (RMS) to be completed with 18 months unless otherwise approved by the AO. The Draft RMS was released on September 30, 2017, for a 90-day public comment period.

12. Detailed Statement of Sale.

Copies of this DSS and the individual Exhibits contained therein are available from the BLM Alaska State Office, either by written request, the BLM website, or by telephone request at (907) 271-5960.

13. Information to Lessees

Section 349(f) of the Energy Policy Act of 2005 (42 U.S.C. 6506a) provides for the reimbursement for reclaiming orphaned (legacy) wells.

When any federal lessee or its agent plugs a legacy well or reclaims the surface of a legacy well site on federal lands, the lessee may enter into an agreement with the AO. The purpose of this agreement is to obtain a credit against a portion of the royalties due under the lessees' federal lease. The legacy well may be a well on any leased or un-leased federal land that the lessee is not legally responsible to reclaim.

Please contact Wayne Svejnoha, Branch Chief for Energy and Minerals at 907-271-4407 for additional information if any lands offered for lease contain a legacy well or legacy well related surface site.

Before undertaking any plugging and reclamation work under this legacy well program, the lessee must enter into an agreement with the AO. The lessee will need to obtain prior approval of the work planned and the type and estimated amount of costs before undertaking any plugging or reclamation work. After work is completed, the lessee must submit an itemized statement of the costs incurred. The AO must ensure that the lessee submits sufficient documentation to enable a determination that the costs are reasonable. If the AO determines that the costs are reasonable, the AO will approve the royalty credit amount. The AO must then notify by memorandum the Washington Office (310) and the Office of Natural Resource Revenue (ONRR) of the credit and the amount.

A royalty credit earned by one party may be transferred or sold to any other qualified party on the condition that the transferee specifically agrees to the terms governing the credit to which the lessee agreed. The parties involved are responsible for notifying ONRR of any royalty credit transfers and submit transferees' written agreement. The BLM will specify the form and content of the agreement.

The following Exhibits are included in the DSS and contain additional information essential for bidders. Bidders are expected to understand the information contained therein.

Exhibit A: Locator Map Tracts Offered

Exhibit B: Description of the Tracts Offered

Exhibit C: Appendix A of the NPR-A Record of Decision with the Lease Stipulations and Best Management Practices

Exhibit D: The Colville River Special Area Management Plan Decision Record and Table Protection Measures 1 thru 9

Exhibit E: Bid Form and Envelope

Exhibit F: Bidder Contact Form

Exhibit G: Oil and Gas Lease Bond Form 3000-4 (This form may be used for lease, statewide, nationwide, or NPR-A-wide bonds).

Exhibit H: Geophysical Exploration Rider Form for Use with NPR-A-wide bonds

Exhibit I: Sample Lease Form AK-3130-1

EXHIBIT A

Locator Map of Tracts Offered



National Petroleum Reserve in Alaska, 2018 Lease Tracts Offered

DEPT. OF INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA

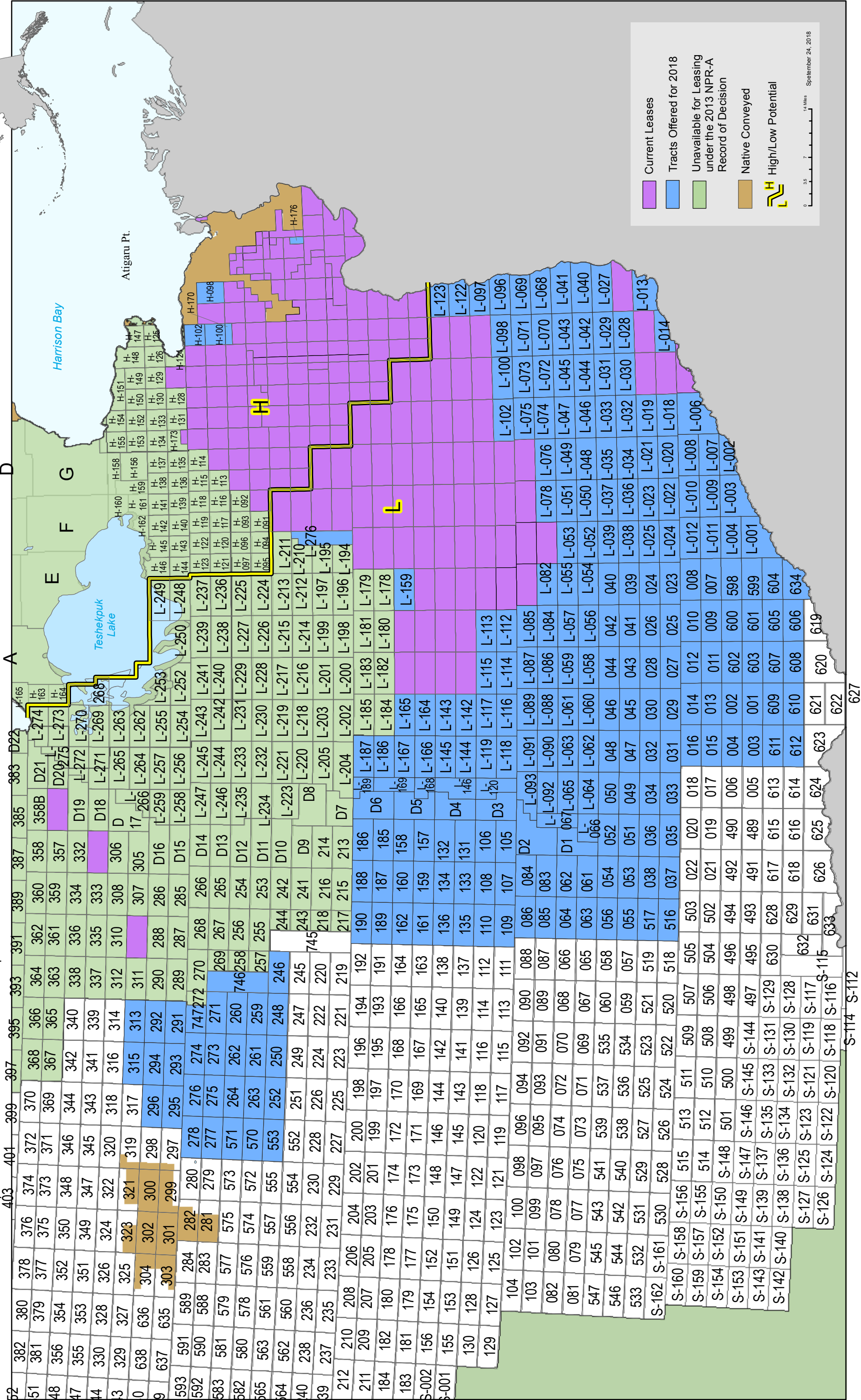


EXHIBIT B

DESCRIPTION OF TRACTS OFFERED

NOTE 1 All lands are based on the Umat Meridian.

NOTE 2 In addition to the Tract-specific K stipulations and Colville River Special Area Protection Measures listed below, all of the stipulations in Exhibits C and D are applicable to all lands to be leased and will be attached to and made a part of each such lease.

NOTE 3 Exhibit B is based on the BLM's current mapping. Stipulations and CRSA Protection measures apply to all leases as appropriate based upon mapping current at the time of application for BLM authorization for post-leasing activity.

NPR-A H-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>STIPULATIONS AND/OR PROTECTIONS</u>	<u>ACRES</u>
2018-H-098	T12N, R2E	Secs. 13-15, 22-27, 34-36		7,680
2018-H-100	T12N, R1E	Secs. 22-27, 34-36		5,766
2018-H-102	T12N, R1E	Secs. 1-3, 10-15	Protections 4-6	5,766
2018-H-170	T11N, R1E	Secs. 1-3		1,920
2018-H-176	T 10 N, R3E	Secs 25 & 36		1,280
				22,412

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-001	T2S, R5W T3S, R5W	Secs. 19-36 Secs. 2-10, 18 and 19 K-1(a), Protections 4-6	15,610
2018-L-002	T2S, R3W	Secs. 1-18 K-1(a), Protections 4-6	7,439
2018-L-003	T2S, R4W	Secs 1-24, 27-32 K-1(a), Protections 4-6	15,245
2018-L-004	T2S, R5W	Secs. 1-18	11,400
2018-L-006	T1S, R2W T2W, R2W	Secs. 1-33 Sec 6 K-1(a), Protections 4-6	17,804
2018-L-007	T1S, R3W	Secs. 19-36 Secs. 2-10, 18 and 19 K-1(a), Protections 4-6	11,389
2018-L-008	T1S, R3W	Secs. 1-18 Protections 4-6	11,366
2018-L-009	T1S, R4W	Secs. 19-36 Protections 4-6	11,389
2018-L-010	T1S, R4W	Secs. 1-18 Protections 4-6	11,366
2018-L-011	T1S, R5W	Secs. 19-36 Protections 4-6	11,380
2018-L-012	T1S, R5W	Secs. 1-18 Protections 4-6	11,363
2018-L-013	T1N, R2E	Secs. 1-23 K-1(a), Protections 4-6	10,789
2018-L-014	T1N, R1E	Secs. 19-34 K-1(a), Protections 4-6	7,984
2018-L-018	T1N, R2W	Secs. 19-36 Protections 4-6	11,525
2018-L-019	T1N, R2W	Secs. 1-18 Protections 4-6	11,497
2018-L-020	T1N, R3W	Secs. 19-36 K-1(d), Protections 4-6	11,525
2018-L-021	T1N, R3W	Secs. 1-18 K-1(d), Protections 4-6	11,497
2018-L-022	T1N, R4W	Secs. 19-36	11,523
2018-L-023	T1N, R4W	Secs. 1-18 K-1(d)	11,495
2018-L-024	T1N, R5W	Secs. 19-36	11,515

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-025	T1N, R5W	Secs. 1-18 K-1(f)(d)	11,487
2018-L-027	T2N, R2E T2N, R3E	Secs. 1-18 Secs 5, 6, 7, 17, 18 K-1(a), Protections 4-6	12,937
2018-L-028	T2N, R1E	Secs. 19-36 K-1(d), Protections 4-6	11,477
2018-L-029	T2N, R1E	Secs. 1-18 K-1(d), Protections 4-6	11,449
2018-L-030	T2N, R1W	Secs. 19-36 K-1(d), Protections 4-6	11,478
2018-L-031	T2N, R1W	Secs. 1-18 K-1(d), Protections 4-6	11,456
2018-L-032	T2N, R2W	Secs. 19-36 K-1(d), Protections 4-6	11,479
2018-L-033	T2N, R2W	Secs. 1-18 K-1(d), Protections 4-6	11,456
2018-L-034	T2N, R3W	Secs. 19-36 K-1(d)	11,479
2018-L-035	T2N, R3W	Secs. 1-18 K-1(d), Protections 4-6	11,456
2018-L-036	T2N, R4W	Secs. 19-36 K-1(d)	11,475
2018-L-037	T2N, R4W	Secs. 1-18 K-1(d), Protections 4-6	11,453
2018-L-038	T2N, R5W	Secs. 19-36 K-1(f)	11,465
2018-L-039	T2N, R5W	Secs. 1-18 K-1(f)	11,446
2018-L-040	T3N, R2E T3N, R3E	Secs. 19-36 Secs. 19-20, 29-32 K-1(a), Protections 4-6	13,641
2018-L-041	T3N, R2E T3N, R3E	Secs. 1-18 Secs. 5-8, 17-18 K-1(a), Protections 4-6	13,498
2018-L-042	T3N, R1E	Secs. 19-36 K-1(d), Protections 4-6	11,424
2018-L-043	T3N, R1E	Secs. 1-18 K-1(d), Protections 4-6	11,406
2018-L-044	T4N, R1W	Secs. 19-36 K-1(d), Protections 4-6	11,430
2018-L-045	T3N, R1W	Secs. 1-18 K-1(d), Protections 4-6	11,408

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-046	T3N, R2W	Secs. 19-36 K-1(d), Protections 4-6	11,432
2018-L-047	T3N, R2W	Secs. 1-18 K-1(d), Protections 4-6	11,410
2018-L-048	T3N, R3W	Secs. 19-36 K-1(d), Protections 4-6	11,432
2018-L-049	T3N, R3W	Secs. 1-18 K-1(d), Protections 4-6, K-2	11,409
2018-L-050	T3N, R4W	Secs. 19-36 K-1(d), Protections 4-6	11,429
2018-L-051	T3N, R4W	Secs. 1-18 K-1(f)(d), Protections 4-6	11,409
2018-L-052	T3N, R5W	Secs. 19-36 K-1(f)	11,418
2018-L-053	T3N, R5W	Secs. 1-18 K-1(f)	11,403
2018-L-054	T3N, R6W	Secs. 19-36	11,428
2018-L-055	T3N, R6W	Secs. 1-18	11,409
2018-L-056	T3N, R7W	Secs. 19-36	11,432
2018-L-057	T3N, R7W	Secs. 1-18	11,410
2018-L-058	T3N, R8W	Secs. 19-36	11,432
2018-L-059	T3N, R8W	Secs. 1-18	11,410
2018-L-060	T3N, R9W	Secs. 19-36	11,424
2018-L-061	T3N, R9W	Secs. 1-18	11,408
2018-L-062	T3N, R10W	Secs. 19-36	11,423
2018-L-063	T3N, R10W	Secs. 1-18	11,403
2018-L-064	T3N, R11W	Secs. 19-36	11,421
2018-L-065	T3N, R11W	Secs. 1-18	11,400
2018-L-066	T3N, R11W	Secs. 21-28, 33-36 K-1(b)	7,680

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-067	T4N, R12W	Secs. 1-2, 11-14, 23-26, and 35-36 K-1(b)	7,682
2018-L-068	T4N, R2E T4N, R3E	Secs. 19-36 Secs. 19, 30-31 K-1(a), Protections 4-6	11,932
2018-L-069	T4N, R2E	Secs. 1-18 K-1(a), Protections 4-6	10,836
2018-L-070	T4N, R1E	Secs. 19-36 K-1(d), Protections 4-6	11,374
2018-L-071	T4N, R1E	Secs. 1-18 K-1(d), Protections 4-6	11,349
2018-L-072	T4N, R1W	Secs. 19-36 Protections 4-6	11,377
2018-L-073	T4N, R1W	Secs. 1-18 K-1(d), Protections 4-6	11,349
2018-L-074	T4N, R2W	Secs. 19-36 K-1(d), Protections 4-6	11,381
2018-L-075	T4N, R2W	Secs. 1-18 K-1(d), Protections 4-6	11,351
2018-L-076	T4N, R3W	Secs. 19-36 K-1(d), Protections 4-6, K-2	11,386
2018-L-078	T4N, R4W	Secs. 19-36 K-1(f)	11,385
2018-L-082	T4N, R6W	Secs. 19-36	11,385
2018-L-084	T4N, R7W	Secs. 19-36	11,386
2018-L-085	T4N, R7W	Secs. 1-18	11,358
2018-L-086	T4N, R8W	Secs. 19-36	11,385
2018-L-087	T4N, R8W	Secs. 1-18	11,385
2018-L-088	T4N, R9W	S 1/2 Sections 19-36 K-2	11,382
2018-L-089	T4N, R9W	N 1/2 Sections 1-18 K-2	11,353
2018-L-090	T4N, R10W	S 1/2 Sections 19-36 K-2	11,373
2018-L-091	T4N, R10W	N 1/2 Sections 1-18 K-2	11,348
2018-L-092	T4N, R11W	S 1/2 Sections 19-36	11,372

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-093	T4N, R11W T4N, R12W	N 1/2 Sections 1-4, 7-13, 15-18 N 1/2 Section 13	10,768
2018-L-096	T5N, R2E	S 1/2 Sections 19-36 K-1(a), K-1(d), Protections 4	10,752
2018-L-097	T5N, R2E	N 1/2 Sections 2-11, 13-18 K-1(a), K-1(d), Protections 4 thru 6	8,884
2018-L-098	T5N, R1E	S 1/2 Sections 19-36 K-1(d), Protections 4 thru 6	11,517
2018-L-100	T5N, R1W	S 1/2 Sections 19-36 K-1(d), Protections 4 thru 6	11,517
2018-L-102	T5N, R1W	S 1/2 Sections 19-36 K-1(d), Protections 4 thru 6	11,520
2018-L-112	T5N, R7W	S 1/2 Sections 19-36 K-2	11,525
2018-L-113	T5N, R7W	N 1/2 Sections 1-18 K-2	11,501
2018-L-114	T5N, R8W	S 1/2 Sections 19-36 K-2	11,525
2018-L-115	T5N, R8W	N 1/2 Sections 1-18 K-2	11,500
2018-L-116	T5N, R9W	S 1/2 Sections 19-36 K-2	11,522
2018-L-117	T5N, R9W	N 1/2 Sections 1-18 K-2	11,500
2018-L-118	T5N, R10W	S 1/2 Sections 19-36	11,515
2018-L-119	T5N, R10W	N 1/2 Sections 1-18	11,488
2018-L-120	T5N, R11W	Sections 1-3, 10-15, 23-26, and 35, 36 K-1(b)	9,602
2018-L-122	T6N, R2E	S 1/2 Sections 19-23, 25-36 K-1(a), K-1(d), Protections 4 thru 6	9,219
2018-L-123	T6N, R2E	N 1/2 Sections 2-11, 14-18 K-1(a), K-1(d), Protections 4 thru 6	8,801
2018-L-142	T6N, R9W	S 1/2 Sections 19-36 K-2	11,468
2018-L-143	T6N, R9W	N 1/2 Sections 1-18 K-2	11,447

NPR-A L-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-L-144	T6N, R10W	S 1/2 Sections 19-36	11,467
2018-L-145	T6N, R10W	N 1/2 Sections 1-18 K-2	11,443
2018-L-146	T6N, R11W	N 1/2 Sections 1, 2, 11-15, S 1/2 Sections 22-27, 34-36 K-2	10,240
2018-L-159	T7N, R6W	N 1/2 Sections 1-18 K-2	11,407
2018-L-164	T7N, R9W	S 1/2 Sections 19-36 K-2	11,424
2018-L-165	T7N, R9W	N 1/2 Sections 1-18 K-2	11,400
2018-L-166	T7N, R10W	S 1/2 Sections 19-36 K-2	11,422
2018-L-167	T7N, R10W	N 1/2 Sections 1-18 K-2	11,402
2018-L-168	T7N, R11W	S 1/2 Sections 22-27, 35-26 K-1(b), K-2	5,122
2018-L-169	T7N, R11W	N 1/2 Sections 1, 2, 11-14 S 1/2 Sections 23-26, 35-36	7,691
2018-L-186	T8N, R10W	S 1/2 Sections 19-36 K-2	11,374
2018-L-187	T8N, R10W	N 1/2 Sections 1-18 K-2	11,355
2018-L-189	T8N, R11W	N 1/2 Sections 1-3, 11-14 K-1(b), K-2	4,487
2018-L-276	T9N, R5W T10N, R5W	Sections 1-2, 11-14, and 24-26, 35-36 Sections 27-26, 35-36, K-2	7,044
			1,275,017

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-001	T2S, R9W	S 1/2 Sections 19-36 K-1(m)	11,434
2018-002	T2S, R9W	N 1/2 Sections 1-18 K-1(m)	11,406
2018-003	T2S, R10W	S 1/2 Sections 19-36	11,434
2018-004	T2S, R10W	N 1/2 Sections 1-18 K-1(m)	11,406
2018-007	T1S, R6W	S 1/2 Sections 19-36	11,388
2018-008	T1S, R6W	N 1/2 Sections 1-18	11,365
2018-009	T1S, R7W	S 1/2 Sections 19-36 K-1(m)	11,389
2018-010	T1S, R7W	N 1/2 Sections 1-18 K-1(m)	11,366
2018-011	T1S, R8W	S 1/2 Sections 19-36 K-1(m)	11,389
2018-012	T1S, R8W	N 1/2 Sections 1-18 K-1(m)	11,366
2018-013	T1S, R9W	S 1/2 Sections 19-36	11,389
2018-014	T1S, R9W	N 1/2 Sections 1-18	11,365
2018-015	T1S, R10W	S 1/2 Sections 19-36 K-1(m)	11,389
2018-016	T1S, R10W	N 1/2 Sections 1-18	11,366
2018-023	T1N, R6W	S 1/2 Sections 19-36	11,520
2018-024	T1N, R6W	N 1/2 Sections 1-18	11,493
2018-025	T1N, R7W	S 1/2 Sections 19-36	11,525
2018-026	T1N, R7W	N 1/2 Sections 1-18	11,497
2018-027	T1N, R8W	S 1/2 Sections 19-36	11,525
2018-028	T1N, R8W	N 1/2 Sections 1-18	11,497
2018-029	T1N, R9W	S 1/2 Sections 19-36	11,525
2018-030	T1N, R9W	N 1/2 Sections 1-18	11,494

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-031	T1N, R10W	S 1/2 Sections 19-36	11,525
2018-032	T1N, R10W	N 1/2 Sections 1-18	11,495
2018-033	T1N, R11W	S 1/2 Sections 19-36 K-1(b)	11,522
2018-034	T1N, R11W	N 1/2 Sections 1-18	11,493
2018-035	T1N, R12W	S 1/2 Sections 19-36 K-1(b)	11,520
2018-036	T1N, R12W	N 1/2 Sections 1-18 K-1(b)	11,489
2018-037	T1N, R13W	S 1/2 Sections 19-36	11,522
2018-038	T1N, R13W	N 1/2 Sections 1-18	11,493
2018-039	T2N, R6W	S 1/2 Sections 19-36	11,473
2018-040	T2N, R6W	N 1/2 Sections 1-18	11,451
2018-041	T2N, R7W	S 1/2 Sections 19-36	11,479
2018-042	T2N, R7W	N 1/2 Sections 1-18	11,456
2018-043	T2N, R8W	S 1/2 Sections 19-36	11,478
2018-044	T2N, R8W	N 1/2 Sections 1-18	11,454
2018-045	T2N, R9W	S 1/2 Sections 19-36	11,479
2018-046	T2N, R9W	N 1/2 Sections 1-18	11,454
2018-047	T2N, R10W	S 1/2 Sections 19-36	11,475
2018-048	T2N, R10W	N 1/2 Sections 1-18	11,454
2018-049	T2N, R11W	S 1/2 Sections 19-36	11,469
2018-050	T2N, R11W	N 1/2 Sections 1-18	11,448
2018-051	T2N, R12W	S 1/2 Sections 19-36 K-1(b)	11,469
2018-052	T2N, R12W	N 1/2 Sections 1-18 K-1(b)	11,447

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-053	T2N, R11W	S 1/2 Sections 19-36	11,477
2018-054	T2N, R13W	N 1/2 Sections 1-18 K-1(b)	11,454
2018-055	T2N, R14W	S 1/2 Sections 19-36	11,479
2018-056	T2N, R14W	N 1/2 Sections 1-18	11,456
2018-061	T3N, R13W	S 1/2 Sections 19-36 K-1(b)	11,427
2018-062	T3N, R13W	N 1/2 Sections 1-18 K-1(b)	11,406
2018-063	T3N, R14W	S 1/2 Sections 19-36	11,432
2018-064	T3N, R14W	N 1/2 Sections 1-18 K-1(k)	11,410
2018-083	T4N, R13W	S 1/2 Sections 19-36	11,381
2018-084	T4N, R13W	N 1/2 Sections 1-18	11,355
2018-085	T4N, R14W	S 1/2 Sections 19-36 K-1(k)	11,386
2018-086	T4N, R14W	N 1/2 Sections 1-18 K-1(k)	11,358
2018-105	T5N, R12W	S 1/2 Sections 19-36	11,513
2018-106	T5N, R12W	N 1/2 Sections 1-18 K-1(b)(k)	11,490
2018-107	T5N, R13W	S 1/2 Sections 19-36 K-1(k)	11,522
2018-108	T5N, R13W	N 1/2 Sections 1-18 K-1(k)	11,501
2018-109	T5N, R14W	S 1/2 Sections 19-36 K-1(k)	11,525
2018-110	T5N, R14W	N 1/2 Sections 1-18 K-1(j)	11,501
2018-131	T6N, R12W	S 1/2 Sections 19-36 K-1(b)	11,466
2018-132	T6N, R12W	N 1/2 Sections 1-18	11,441
2018-133	T6N, R13W	S 1/2 Sections 19-36	11,473
2018-134	T6N, R13W	S 1/2 Sections 19-36	11,449

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-135	T6N, R14W	S 1/2 Sections 19-36	11,478
2018-136	T6N, R14W	N 1/2 Sections 1-18	11,449
2018-157	T7N, R12W	S 1/2 Sections 19-36 K-1(k)	11,420
2018-158	T7N, R12W	N 1/2 Sections 1-18 K-1(b)	11,399
2018-159	T7N, R13W	S 1/2 Sections 19-36 K-1(j)	11,431
2018-160	T7N, R13W	N 1/2 Sections 1-18 K-1(j)	11,407
2018-161	T7N, R14W	S 1/2 Sections 19-36 K-1(j)	11,431
2018-162	T7N, R14W	N 1/2 Sections 1-18 K-1(j)	11,407
2018-185	T8N, R12W	S 1/2 Sections 19-36 K-1(b)	11,370
2018-186	T8N, R12W	N 1/2 Sections 1-18 K-1(b)	11,346
2018-187	T8N, R13W	S 1/2 Sections 19-36	11,383
2018-188	T8N, R13W	N 1/2 Sections 1-18	11,355
2018-189	T8N, R14W	S 1/2 Sections 19-36 K-1(j)	11,383
2018-190	T8N, R14W	N 1/2 Sections 1-18 K-1(j)	11,355
2018-246	T10N, R15W	N 1/2 Sections 1-18 K-1(n)	11,447
2018-248	T10N, R16W	N 1/2 Sections 1-18 K-1(n)	11,438
2018-250	T10N, R17W	N 1/2 Sections 1-18	11,437
2018-252	T10N, R18W	N 1/2 Sections 1-18	11,437
2018-259	T11N, R16W	S 1/2 Sections 19-36 K-1(n)	11,414
2018-260	T11N, R16W	N 1/2 Sections 1-18 K-1(n)	11,389
2018-261	T11N, R16W	S 1/2 Sections 19-36	11,413
2018-262	T11N, R17W	N 1/2 Sections 1-18	11,389

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-263	T11N, R18W	S 1/2 Sections 19-36	11,413
2018-264	T11N, R18W	N 1/2 Sections 1-18	11,389
2018-271	T12N, R16W	S 1/2 Sections 19-36 K-1(n), K-2	11,365
2018-273	T12N, R16W	S 1/2 Sections 19-36 K-2	11,365
2018-274	T12N, R17W	N 1/2 Sections 1-18 K-2	11,341
2018-275	T12N, R18W	S 1/2 Sections 19-36	11,365
2018-276	T12N, R18W	N 1/2 Sections 1-18 K-2	11,341
2018-277	T12N, R19W	S 1/2 Sections 19-36 K-2	11,365
2018-278	T12N, R19W	N 1/2 Sections 1-18 K-2	11,346
2018-291	T13N, R16W	S 1/2 Sections 19-36	11,512
2018-292	T13N, R16W	N 1/2 Sections 1-18	11,484
2018-293	T13N, R17W	S 1/2 Sections 19-36	11,514
2018-294	T13N, R17W	N 1/2 Sections 1-18 K-2	11,484
2018-295	T13N, R18W	S 1/2 Sections 19-36 K-2	11,514
2018-296	T13N, R18W	N 1/2 Sections 1-18 K-2	11,484
2018-313	T14N, R16W	S 1/2 Sections 19-36 K-1(n)	11,460
2018-315	T14N, R17W	S 1/2 Sections 19-36 K-2	11,460
2018-516	T1N, R14W	S 1/2 Sections 19-36	11,525
2018-517	T1N, R14W	N 1/2 Sections 1-18	11,497
2018-553	T10N, R19W	N 1/2 Sections 1-18 K-1(q), K-2	11,437
2018-570	T11N, R19W	S 1/2 Sections 19-36 K-1(q), K-2	11,413
2018-571	T11N, R19W	N 1/2 Sections 1-18 K-2	11,389

NPR-A #-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2018-598	T2S, R6W	N 1/2 Sections 1-18	11,405
2018-599	T2S, R6W	S 1/2 Sections 19-36	11,429
2018-600	T2S, R7W	N 1/2 Sections 1-18 K-1(m)	11,406
2018-601	T2S, R7W	S 1/2 Sections 19-36 K-1(m)	11,434
2018-602	T2S, R8W	N 1/2 Sections 1-18	11,406
2018-603	T2S, R8W	S 1/2 Sections 19-36 K-1(m)	11,433
2018-604	T3S, R6W	N 1/2 Sections 1-18 K-1(a), Protections 4-6	11,454
2018-605	T3S, R7W	N 1/2 Sections 1-18 Protections 4-6	11,458
2018-606	T3S, R7W	S 1/2 Sections 19-36 Protections 4-6	11,480
2018-607	T3S, R8W	N 1/2 Sections 1-18 Protections 4-6	11,458
2018-608	T3S, R8W	S 1/2 Sections 19-36 Protections 4-6	11,479
2018-609	T3S, R9W	N 1/2 Sections 1-18 Protections 4-6	11,458
2018-610	T3S, R9W	S 1/2 Sections 19-36 Protections 4-6	11,478
2018-611	T3S, R10W	N 1/2 Sections 1-18 Protections 4-6	11,458
2018-612	T3S, R10W	S 1/2 Sections 19-36 Protections 4-6	11,480
2018-634	T3S, R6W T4S, R6W	Secs. 19-35 Secs. 2-7 K-1(a), Protections 4-6	10,505
2018-746	T11N, R15W	Secs. 4-9, 16-21, 28-33 K-2	11,289
2018-747	T12N, R16W	Secs. 3-10, 15-18 K-2	7,501
			1,459,427

NPR-A D-Tracts Offered

<u>Tract #</u>	<u>MTR</u>	<u>SEC</u>	<u>ACRES</u>
2017-D1	T3N, R12W	Secs. 3-10, 15-20, 29-32 K-1(b), K-2	11,296
2017-D2	T4N, R11W T4N, R12W	Secs. 5-6 Secs. 1-12, 14-22, 27-34 K-1(b), K-2	19,459
2017-D3	T5N, R11W	Secs. 4-9, 16-22, 27-34 K-1(b)	13,397
2017-D4	T6N, R11W	Secs. 3-10, 16-21, 28-33 K-1(b)	12,661
2017-D5	T7N, R11W	Secs. 3-10, 15-21, 28-34 K-1(b)	13,853
2017-D6	T8N, R11W	Secs. 4-10, 15-22, 27-34 K-1(b)	14,397
			85,063

EXHIBIT C

APPENDIX A of the NPR-A RECORD OF DECISION with the Lease Stipulations and Best Management Practices

APPENDIX A: LEASE STIPULATIONS AND BEST MANAGEMENT PRACTICES

Definitions

The following definitions apply to the stipulations and best management practices listed in this appendix. The Glossary of the Final IAP/EIS has additional definitions.

Active Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters, including the flood-prone areas of offshore islands, composing, 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).

Authorized Officer: A position of authority for approval of various activities through delegation from the Secretary of the Interior. Currently, the designated authorized officers in Alaska for leasing, surface use, and permitting are 1) State Director, 2) Manager of the Arctic Field Office in Fairbanks, and 3) Deputy State Director, Division of Resources.

Best Management Practice: Mitigation developed through the BLM planning process/NEPA process that is not attached to the oil and gas lease but is required, implemented, and enforced at the operational level for all authorized (not just oil and gas) activities in the planning area.

Best management practices were developed with various mechanisms in place to ensure compliance. These mechanisms include the following:

1. Some best management practices are pre-application requirements; therefore compliance will precede approval of the proposed activity. For example, Best Management Practice H-1(a) requires consultation with affected communities prior to submission of an application for relevant activities within the NPR-A. If consultation has not taken place, the application will be rejected or will be considered incomplete until such time that the consultation has occurred.
2. Other best management practices are required design features, and will have to be incorporated into the applicant's proposal. As an integral part of the proposal and the authorization, the requirement

does not need to be stipulated to be enforceable. For example, a minimum pipeline height of 7 feet for above ground pipelines is a required design of any approved above ground pipeline (Best Management Practice E-7). Since the authorization (a ROW in this case) authorizes a pipeline with a minimum height of 7 feet, anything less (unless specifically approved through additional NEPA analysis and the permit) is not in compliance and enforcement actions may be taken even if the permit does not specify a minimum of 7 feet.

3. Other best management practices will become conditions of approval on post lease land use authorizations. For example, Best Management Practice C-1 prohibits heavy equipment used for cross-country moves within ½ mile of occupied grizzly bear dens.

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

Buffer: A zone extending outward or inward from the periphery of a “protected” feature for a specified distance. Activities and development may be prohibited or limited by type or time within the buffer dependent on the goal associated with applying the buffer.

Class I air quality area: One of 156 protected areas such as national parks (over 6,000 acres), wilderness areas (over 5,000 acres), national memorial parks (over 5,000 acres), and international parks that were in existence as of August 1977, where air quality should be given special protection. Federal Class I areas are subject to maximum limits on air quality degradation called air quality increments (often referred to as Prevention of Significant Deterioration [PSD] increments). All areas of the United States not designated as Class I are Class II areas. The air quality standards in Class I areas are more stringent than national ambient air quality standards.

Consultation: Consultation, as it is referenced in the lease stipulations, does not infer formal consultation as required under other legal mandates such as “Section 7 Consultation” under the ESA. Rather, consultation implies that the BLM or the Lessee/Permittee will contact other agencies or entities to inform them of potential actions and to seek input on noted topics. This includes informal contacts, and written, electronic, and/or verbal communication.

Criteria Air Pollutants: Those pollutants subject to the National Air Quality Standards (<http://www.epa.gov/air/criteria.html>). They currently include carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (both PM₁₀ and PM_{2.5} – inhalable and respirable particulates), and sulfur dioxide (SO₂).

Development Activities: Any activity associated with construction and operation of facilities or equipment post exploration.

Field: The term used to describe the area containing surface infrastructure above one or more subsurface reservoirs. In this sense, “field” is analogous to “a Unit participating area or collection of participating areas.” The infrastructure in the field includes, but is not limited to, drilling and production pads, service roads, perhaps an airstrip, and processing and support facilities. Field infrastructure may be used in the development and production of several oil/gas accumulations in different subsurface reservoirs. Fields typically have a primary reservoir that supports initial development in addition to satellite reservoirs that are developed later and tie into the main facilities. Although oil and gas reservoirs may vary greatly in subsurface depth and other geologic characteristics, because they are located in the same geographic area it is more efficient to coordinate and share the necessary surface infrastructure. Fields may or may not be connected by permanent roads to adjacent fields or transportation facilities outside the field area.

Greenhouse gas (GHG): A gas that absorbs and emits thermal radiation within the lowest layers of the atmosphere. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases that are considered air pollutants are carbon dioxide, (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons (CFCs).

Hazardous air pollutants (HAPs): (also known as toxic air pollutants) Those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. The Environmental Protection Agency (EPA) is required to control 187 hazardous air pollutants. Examples of HAPs include benzene (found in gasoline), perchlorethylene (emitted from dry cleaning facilities), and methylene chloride (used as a solvent).

Lease Stipulation: Mitigation developed through BLM planning process/NEPA process that is specifically attached to a lease.

NO_x: Mono-nitrogen oxides, including nitric oxide (NO) and nitrogen dioxide (NO₂). It is formed when naturally occurring atmospheric nitrogen and oxygen are combusted with fuels in automobiles, power plants, industrial processes, and home and office heating units.

Permanent Oil and Gas Facilities: Permanent Facilities include production facilities, pipelines, roads, airstrips, production pads, docks and other bottom-founded structures, seawater-treatment plants, and other structures associated with an oil and gas operation that occupy land for more than one winter season; also included are material sites such as sand and gravel, and “temporary platforms” if those platforms are used for production rather than exploration. Exploration wellheads and seasonal facilities such as ice roads and ice pads are excluded, even when the pads are designed for use in successive winters. This definition does not include over-summering ice pads for exploration purposes.

Setback: A distance measured from a named ground feature, such as a river or lake, in which certain activities or structures would not be allowed. All setback distances are to be measured as of the time of the application for a permit for a development. In addition, facility development along the coast would be required to be designed to maintain the prescribed setback distance for the anticipated life of the facility.

SO_x: Sulfur oxides, including sulfur dioxide (SO₂). A product of vehicle tailpipe emissions.

Stipulation: A requirement or condition placed by the Bureau of Land Management on the leaseholder for operations the leaseholder might carry out within that lease. The Bureau of Land Management develops stipulations that apply to all future leases within the National Petroleum Reserve-Alaska.

Temporary Platform: A facility that does not require the use of an ice or gravel pad to support oil and gas and related exploration activities. An example of a temporary platform recently used on the North Slope is Anadarko Petroleum's Arctic Drilling Platform used for the company's Hot Ice Project during the winters of 2003-2004. The facility consisted of a series of platform modules joined together and supported above the tundra

surface on steel legs. Once the project was completed the platform was disassembled and the support legs were removed, leaving the tundra surface undisturbed. Note: A temporary platform that is used for production, as opposed to exploration, would be considered a permanent oil and gas facility and be subject to the restrictions on placement of such structures.

Valid existing: in the context of exceptions for the development of “valid existing NPR-A oil and gas leases,” “valid existing” leases refers to oil and gas leases issued by the BLM prior to the signing of this record of decision and valid at the time of the application for approval of an action for which the “valid existing NPR-A oil and gas lease” exception is requested.

Volatile Organic Compounds (VOCs): A group of chemicals that react in the atmosphere with nitrogen oxides in the presence of sunlight and heat to form ozone. VOCs contribute significantly to photochemical smog production and certain health problems. Examples of VOCs are gasoline fumes and oil-based paints.

Applicability of Requirements/Standards

All surface disturbing activities such as exploratory drilling, road/pipeline construction, seismic acquisition, and overland moves require additional authorization(s) issued subsequent to leasing. The stipulations and best management practices require that certain protections of resources and uses be achieved. Requirements and standards listed with the stipulations and best management practices represent BLM’s current understanding of how lessees/permittees would achieve the objectives of the stipulation or best management practice.

A lessee/permittee may propose a deviation from the requirements/standards of stipulations and best management practices as part of an authorization application. Prior to approving an alternative procedure as part of the authorization, BLM’s staff would analyze the proposal and determine if the proposal incorporating the alternative procedure would achieve the objectives of the stipulations and best management practices. If the BLM determines that the alternative procedure proposed by the applicant would meet the stipulation’s or best management practice’s objective, BLM could approve the alternative procedure. If BLM determines that the alternative procedure proposed by the applicant is unlikely to meet the objectives of a

stipulation or best management practice, the requirements/standards would still be required. However, the authorized officer may allow a deviation from the objectives and requirement/standard in a new decision document supported by additional NEPA analysis.

The BLM could independently require different actions than those listed under requirements/standards. If, after experience or additional study, BLM concludes that a requirement/standard is not achieving or is unlikely to achieve the protective objective when applied to a specific future on-the-ground action or would not do so as well as the use of recently proven technology or techniques, BLM could at the permitting stage and under the terms of the stipulation or best management practice, impose other restrictions to meet the objective.

Stipulations and Best Management Practices

Waste Prevention, Handling, Disposal, Spills, Air Quality, and Public Health and Safety

A-1 Best Management Practice

Objective: Protect the health and safety of oil and gas field workers and the general public by disposing of solid waste and garbage in accordance with applicable federal, State, and local law and regulations.

Requirement/Standard: Areas of operation shall be left clean of all debris.

A-2 Best Management Practice

Objective: Minimize impacts on the environment from non-hazardous and hazardous waste generation. Encourage continuous environmental improvement. Protect the health and safety of oil field workers and the general public. Avoid human-caused changes in predator populations.

Requirement/Standard: Lessees/permittees shall prepare and implement a comprehensive waste management plan for all phases of exploration and development, including seismic activities. The plan shall be submitted to the authorized officer for approval, in consultation with federal, State, and North Slope Borough regulatory and resource agencies, as appropriate (based on agency legal authority and jurisdictional responsibility), as part of a plan of operations or other similar permit application.

Management decisions affecting waste generation shall be addressed in the following order of priority: 1) prevention and reduction, 2) recycling, 3)

treatment, and 4) disposal. The plan shall consider and take into account the following requirements:

- a. Methods to avoid attracting wildlife to food and garbage. The plan shall identify precautions that are to be taken to avoid attracting wildlife to food and garbage
- b. Disposal of putrescible waste. Requirements prohibit the burial of garbage. 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 that prevents the attraction of wildlife. All putrescible waste shall be incinerated, backhauled, or composted in a manner approved by the authorized officer. All solid waste, including incinerator ash, shall be disposed of in an approved waste-disposal facility in accordance with EPA and Alaska Department of Environmental Conservation regulations and procedures. The burial of human waste is prohibited except as authorized by the authorized officer.
- c. Disposal of pumpable waste products. Except as specifically provided, the BLM requires that all pumpable solid, liquid, and sludge waste be disposed of by injection in accordance with EPA, Alaska Department of Environmental Conservation, and the Alaska Oil and Gas Conservation Commission regulations and procedures. On-pad temporary muds and cuttings storage, as approved by Alaska Department of Environmental Conservation, will be allowed as necessary to facilitate annular injection and/or backhaul operations.
- d. Disposal of wastewater and domestic wastewater. The BLM prohibits wastewater discharges or disposal of domestic wastewater into bodies of fresh, estuarine, and marine water, including wetlands, unless authorized by a National Pollutant Discharge Elimination System or State permit.

A-3 Best Management Practice

Objective: Minimize pollution through effective hazardous-materials contingency planning.

Requirement/Standard: For oil- and gas-related activities, a hazardous materials emergency contingency plan shall be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. 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 in the plan applicable to fuel and hazardous substances handling (associated with transportation vehicles) shall consist of

best management practices if approved by the authorized officer. 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 North Slope Borough contacts. Other federal and State regulations may apply and require additional planning requirements. All appropriate staff shall be instructed regarding these procedures. In addition contingency plans related to facilities developed for oil production shall include requirements to:

- a. provide refresher spill-response training to North Slope Borough and local community spill-response teams on a yearly basis,
- b. plan and conduct a major spill-response field-deployment drill annually,
- c. prior to production and as required by law, 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 National Petroleum Reserve-Alaska operating area. Planning shall include development and funding of detailed (e.g., 1:26,000 scale) environmental sensitivity index maps for the lessee's/permittee's operating area and areas outside the lessee's/permittee'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 authorized officer 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 authorized officer in consultation with appropriate federal, State, and North Slope Borough resource and regulatory agencies.

A-4 Best Management Practice

Objective: Minimize the impact of contaminants on fish, wildlife, and the environment, including wetlands, marshes and marine waters, as a result of fuel, crude oil, and other liquid chemical spills. Protect subsistence resources and subsistence activities. Protect public health and safety.

Requirement/Standard: Before initiating any oil and gas or related activity or operation, including field research/surveys and/or seismic operations, lessees/permittees shall develop a comprehensive spill prevention and

response contingency plan per 40 CFR § 112 (Oil Pollution Act). The plan shall consider and take into account the following requirements:

- a. On-site Clean-up Materials. Sufficient oil-spill-cleanup materials (absorbents, containment devices, etc.) shall be stored at all fueling points and vehicle-maintenance areas and shall be carried by field crews on all overland moves, seismic work trains, and similar overland moves by heavy equipment.
- b. Storage Containers. Fuel and other petroleum products and other liquid chemicals shall be stored in proper containers at approved locations. Except during overland moves and seismic operations, fuel, other petroleum products, and other liquid chemicals designated by the authorized officer that in total exceed 1,320 gallons shall be stored within an impermeable lined and diked area or within approved alternate storage containers, such as over packs, capable of containing 110% of the stored volume. In areas within 500 feet of water bodies, fuel containers are to be stored within appropriate containment.
- c. Liner Materials. Liner material shall be compatible with the stored product and capable of remaining impermeable during typical weather extremes expected throughout the storage period.
- d. Permanent Fueling Stations. Permanent fueling stations shall be lined or have impermeable protection to prevent fuel migration to the environment from overfills and spills.
- e. Proper Identification of Containers. All fuel containers, including barrels and propane tanks, shall be marked with the responsible party's name, product type, and year filled or purchased.
- f. Notice of Reportable Spills. Notice of any reportable spill (as required by 40 CFR § 300.125 and 18 AAC § 75.300) shall be given to the authorized officer as soon as possible, but no later than 24 hours after occurrence.
- g. Identification of Oil Pans ("duck ponds"). All oil pans shall be marked with the responsible party's name.

A-5 Best Management Practice

Objective: Minimize the impact of contaminants from refueling operations on fish, wildlife and the environment.

Requirement/Standard: Refueling of equipment within 500 feet of the active floodplain of any water body is prohibited. Fuel storage stations shall be located at least 500 feet from any water body with the exception that small caches (up to 210 gallons) for motor boats, float planes, ski planes, and small equipment, e.g. portable generators and water pumps, are permitted.

The authorized officer may allow storage and operations at areas closer than the stated distances if properly designed to account for local hydrologic conditions.

A-6 Best Management Practice

Objective: Minimize the impact on fish, wildlife, and the environment from contaminants associated with the exploratory drilling process.

Requirement/Standard: Surface discharge of reserve-pit fluids is prohibited.

A-7 Best Management Practice

Objective: Minimize the impacts to the environment of disposal of produced fluids recovered during the development phase on fish, wildlife, and the environment.

Requirement/Standard: Discharge of produced water in upland areas and marine waters is prohibited.

A-8 Best Management Practice

Objective: Minimize conflicts resulting from interaction between humans and bears during oil and gas activities.

Requirement/Standard: Oil and gas lessees and their contractors and subcontractors will, as a part of preparation of lease operation planning, 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 sites to minimize human/bear interactions.
- c. Warn personnel of bears near or on work sites and identify proper procedures to be followed.
- d. Establish procedures, if authorized, to discourage bears from approaching the work site.
- e. Provide contingencies in the event bears do not leave the site or cannot be discouraged by authorized personnel.
- f. Discuss proper storage and disposal of materials that may be toxic to bears.
- g. Provide a systematic record of bears on the work site and in the immediate area.

A-9 Best Management Practice

Objective: Reduce air quality impacts.

Requirement/Standard: All oil and gas operations (vehicles and equipment) that burn diesel fuels must use “ultra-low sulfur” diesel as defined by the Alaska Department of Environmental Conservation-Division of Air Quality.

A-10 Best Management Practice

Objective: Prevent unnecessary or undue degradation of the lands and protect health.

Requirement/Standard: This measure includes the following elements:

- a. Prior to initiation of a NEPA analysis for an application to develop a central production facility, production pad/well, airstrip, road, gas compressor station, or other potential substantial air pollutant emission source (hereafter project), the authorizing officer (BLM) may require the project proponent to provide a minimum of one year of baseline ambient air monitoring data for any pollutant(s) of concern as determined by BLM if no representative air monitoring data are available for the project area, or existing representative ambient air monitoring data are insufficient, incomplete, or do not meet minimum air monitoring standards set by the Alaska DEC or the EPA. If BLM determines that baseline monitoring is required, this pre-analysis data must meet Alaska DEC and EPA air monitoring standards, and cover the year immediately prior to the submittal. Pre-project monitoring may not be appropriate where the life of the project is less than one year.
- b. The BLM may require monitoring for the life of the project depending on the magnitude of potential air emissions from the project, proximity to a federally mandated Class I area, sensitive Class II area (as identified on a case-by-case basis by Alaska DEC or a federal land management agency), or population center, location within or proximity to a non-attainment or maintenance area, meteorological or geographic conditions, existing air quality conditions, magnitude of existing development in the area, or issues identified during NEPA undertaken for the project.
- c. For an application to develop a central production facility, production pad/well, airstrip, road, gas compressor station, or other potential substantial air pollutant emission source, the project proponent shall prepare (and submit for BLM approval) an emissions inventory that includes quantified emissions of regulated air pollutants from all direct and indirect sources related to the proposed project, including

reasonably foreseeable air pollutant emissions of criteria air pollutants, volatile organic compounds, hazardous air pollutants, and greenhouse gases estimated for each year for the life of the project. The BLM will use this estimated emissions inventory to identify pollutants of concern and to determine the appropriate level of air analysis to be conducted for the proposed project.

- d. For an application to develop a central production facility, production pad/well, airstrip, road, gas compressor station, or other potential substantial air pollutant emission source, the BLM may require the proponent to provide an emissions reduction plan that includes a detailed description of operator committed measures to reduce project related air pollutant emissions including, but not limited to greenhouse gases and fugitive dust.
- e. For an application to develop a central production facility, production pad/well, airstrip, road, gas compressor station, or other potential substantial air pollutant emission source, the authorized officer may require air quality modeling for purposes of analyzing project direct, indirect or cumulative impacts to air quality. The BLM may require air quality modeling depending on the magnitude of potential air emissions from the project or activity, duration of the proposed action, proximity to a federally mandated Class I area, sensitive Class II area (as identified on a case-by-case basis by Alaska DEC or a federal land management agency), or population center, location within a non-attainment or maintenance area, meteorological or geographic conditions, existing air quality conditions, magnitude of existing development in the area, or issues identified during NEPA undertaken for the project. The BLM will determine the information required for a project specific modeling analysis through the development of a modeling protocol for each analysis. The authorized officer will consult with appropriate federal, State, and/or local agencies regarding modeling to inform his/her modeling decision and avoid duplication of effort. The modeling shall compare predicted impacts to all applicable local, State, and federal air quality standards and increments, as well as other scientifically defensible significance thresholds (such as impacts to air quality related values, incremental cancer risks, etc.).
- f. The BLM may require air quality mitigation measures and strategies within its authority (and in consultation with local, state, federal, and tribal agencies with responsibility for managing air resources) in addition to regulatory requirements and proponent committed

- emission reduction measures, and for emission sources not otherwise regulated by Alaska DEC or EPA, if the air quality analysis shows potential future impacts to NAAQS or AAAQS or impacts above specific levels of concern for air quality related values (AQRVs).
- g. If ambient air monitoring indicates that project-related emissions are causing or contributing to impacts that would cause unnecessary or undue degradation of the lands, cause exceedances of NAAQS, or fail to protect health (either directly or through use of subsistence resources), the authorized officer may require changes in activities at any time to reduce these emissions to comply with the NAAQS and/or minimize impacts to AQRVs. Within the scope of BLM's authority, the BLM may require additional emission control strategies to minimize or reduce impacts to air quality.
 - h. Publicly available reports on air quality baseline monitoring, emissions inventory, and modeling results developed in conformance with this best management procedure shall be provided by the project proponent to the North Slope Borough and to local communities and Tribes in a timely manner.

A-11 Best Management Practice

Objective: Ensure that permitted activities do not create human health risks through contamination of subsistence foods.

Requirement/Standard: A lessee proposing a permanent oil and gas development shall design and implement a monitoring study of contaminants in locally-used subsistence foods. The monitoring study shall examine subsistence foods for all contaminants that could be associated with the proposed development. The study shall identify the level of contaminants in subsistence foods prior to the proposed permanent oil and gas development and monitor the level of these contaminants throughout the operation and abandonment phases of the development. If ongoing monitoring detects a measurable and persistent increase in a contaminant in subsistence foods, the lessee shall design and implement a study to determine how much, if any, of the increase in the contaminant in subsistence foods originates from the lessee's activities. If the study determines that a portion of the increase in contamination in subsistence foods is caused by the lessee's activities, the authorized officer may require changes in the lessee's processes to reduce or eliminate emissions of the contaminant. The design of the study/studies must meet the approval of the authorized officer. The authorized officer may consult with appropriate federal, State, and North Slope Borough agencies prior to approving the study/studies design. The authorized officer may

require/authorize changes in the design of the studies throughout the operations and abandonment period, or terminate or suspend studies if results warrant.

A-12 Best Management Practice

Objective: To minimize negative health impacts associated with oil spills.

Requirement/Standard: If an oil spill with potential impacts to public health occurs, the BLM, in undertaking its oil spill responsibilities, will consider:

- a. Immediate health impacts and responses for affected communities and individuals.
- b. Long-term monitoring for contamination of subsistence food sources.
- c. Long-term monitoring of potential human health impacts.
- d. Perceptions of contamination and subsequent changes in consumption patterns.
- e. Health promotion activities and communication strategies to maintain the consumption of traditional food.

Water Use for Permitted Activities

B-1 Best Management Practice

Objective: Maintain populations of, and adequate habitat for, fish and invertebrates.

Requirement/Standard: Withdrawal of unfrozen water from rivers and streams during winter is prohibited. The removal of ice aggregate from grounded areas ≤ 4 -feet deep may be authorized from rivers on a site-specific basis.

B-2 Best Management Practice

Objective: Maintain natural hydrologic regimes in soils surrounding lakes and ponds, and maintain populations of, and adequate habitat for, fish, invertebrates, and waterfowl.

Requirement/Standard: Withdrawal of unfrozen water from lakes and the removal of ice aggregate from grounded areas ≤ 4 -feet deep may be authorized on a site-specific basis depending on water volume and depth and the waterbody's fish community. Current water use requirements are:

- a. Lakes with sensitive fish (i.e., any fish except ninespine stickleback or Alaska blackfish): unfrozen water available for withdrawal is limited to 15% of calculated volume deeper than 7 feet; only ice aggregate may be removed from lakes that are ≤ 7 -feet deep.

- b. Lakes with only non-sensitive fish (i.e., ninespine stickleback or Alaska blackfish): unfrozen water available for withdrawal is limited to 30% of calculated volume deeper than 5 feet; only ice aggregate may be removed from lakes that are ≤ 5 .
- c. Lakes with no fish present, regardless of depth: water available for use is limited to 35% of total lake volume.
- d. In lakes where unfrozen water and ice aggregate are both removed, the total use shall not exceed the respective 15%, 30%, or 35% volume calculations.
- e. Additional modeling or monitoring may be required to assess water level and water quality conditions before, during, and after water use from any fish-bearing lake or lake of special concern.
- f. Any water intake structures in fish bearing or non-fish bearing waters shall be designed, operated, and maintained to prevent fish entrapment, entrainment, or injury. Note: All water withdrawal equipment must be equipped and must utilize fish screening devices approved by the Alaska Department of Fish and Game, Division of Habitat.
- g. Compaction of snow cover or snow removal from fish-bearing waterbodies shall be prohibited except at approved ice road crossings, water pumping stations on lakes, or areas of grounded ice.

Winter Overland Moves and Seismic Work

The following best management practices apply to overland moves, seismic work, and any similar cross-country vehicle use of heavy equipment on non-roaded surfaces during the winter season. These restrictions do not apply to the use of such equipment on ice roads after they are constructed.

C-1 Best Management Practice

Objective: Protect grizzly bear, polar bear, and marine mammal denning and/or birthing locations.

Requirement/Standard:

- a. Cross-country use of heavy equipment and seismic activities is prohibited within $\frac{1}{2}$ mile of occupied grizzly bear dens identified by the Alaska Department of Fish and Game unless alternative protective measures are approved by the authorized officer in consultation with the Alaska Department of Fish and Game.
- b. Cross-country use of heavy equipment and seismic activity is prohibited within 1 mile of known or observed polar bear dens or seal

birthing lairs. Operators near coastal areas shall conduct a survey for potential polar bear dens and seal birthing lairs and consult with the USFWS and/or NOAA-Fisheries, as appropriate, before initiating activities in coastal habitat between October 30 and April 15.

C-2 Best Management Practice

Objective: Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.

Requirement/Standard:

- a. Ground operations shall be allowed only when frost and snow cover are at sufficient depths to protect the tundra. Ground operations shall cease when the spring snowmelt begins (approximately May 5 in the foothills area where elevations reach or exceed 500 feet and approximately May 15 in the northern coastal areas). The exact dates will be determined by the authorized officer.
- b. Low-ground-pressure vehicles shall be used for on-the-ground activities off ice roads or pads. Low-ground-pressure vehicles shall be selected and operated in a manner that eliminates direct impacts to the tundra by shearing, scraping, or excessively compacting the tundra mat. Note: This provision does not include the use of heavy equipment such as front-end loaders and similar equipment required during ice road construction.
- c. Bulldozing of tundra mat and vegetation, trails, or seismic lines is prohibited; however, on existing trails, seismic lines or camps, clearing of drifted snow is allowed to the extent that the tundra mat is not disturbed.
- d. 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 hardened snow trails for use by low-ground-pressure vehicles such as Rolligons.
- e. The location of ice roads shall be designed and located to minimize compaction of soils and the breakage, abrasion, compaction, or displacement of vegetation. Offsets may be required to avoid using the same route or track in the subsequent year.
- f. Motorized ground-vehicle use within the Colville River Special Area associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within an area that extends 1 mile west or northwest of the bluffs of the Colville River, and 2 miles on either side of the Kogosukruk and Kikiakrorak rivers and

tributaries of the Kogosukruk River 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 1/2 mile away from known raptor nesting sites, unless authorized by the authorized officer.

C-3 Best Management Practice

Objective: Maintain natural spring runoff patterns and fish passage, avoid flooding, prevent streambed sedimentation and scour, protect water quality, and protect stream banks.

Requirement/Standard: Crossing of waterway courses shall be made using a low-angle approach. Crossings that are reinforced with additional snow or ice (“bridges”) shall be removed, breached, or slotted before spring breakup. Ramps and bridges shall be substantially free of soil and debris.

C-4 Best Management Practice

Objective: Avoid additional freeze-down of deep-water pools harboring over-wintering fish and invertebrates used by fish.

Requirement/Standard: Travel up and down streambeds is prohibited unless it can be demonstrated that there will be no additional impacts from such travel to over-wintering fish or the invertebrates they rely on. Rivers, streams, and lakes shall be crossed at areas of grounded ice whenever possible.

C-5 Best Management Practice

Objective: Minimize the effects of high-intensity acoustic energy from seismic surveys on fish.

Requirement/Standard:

- a. When conducting vibroseis-based surveys above potential fish overwintering areas (water 6 feet deep or greater, ice plus liquid depth), operators shall follow recommendations by Morris and Winters (2005): only a single set of vibroseis shots should be conducted if possible; if multiple shot locations are required, these should be conducted with minimal delay; multiple days of vibroseis activity above the same overwintering area should be avoided if possible.
- b. When conducting air gun-based surveys in freshwater, operators shall follow standard marine mitigation measures that are applicable to fish (e.g., Minerals Management Service 2006): operators will use the lowest sound levels feasible to accomplish their data-collection needs;

ramp-up techniques will be utilized (ramp-up involves the gradual increase in emitted sound levels beginning with firing a single air gun and gradually adding air guns until the desired operating level of the full array is obtained).

- c. When conducting explosive-based surveys, operators shall follow setback distances from fish-bearing waterbodies based on requirements outlined by Alaska Department of Fish and Game (1991).

Oil and Gas Exploratory Drilling

D-1 Lease Stipulation

Objectives: Protect fish-bearing rivers, streams, and lakes from blowouts and minimize alteration of riparian habitat.

Requirement/Standard: Exploratory drilling is prohibited in rivers and streams, as determined by the active floodplain, and fish-bearing lakes.

D-2 Lease Stipulation

Objective: Minimize surface impacts from exploratory drilling.

Requirement/Standard: Construction of permanent or gravel oil and gas facilities shall be prohibited for exploratory drilling. Use of a previously constructed road or pad may be permitted if it is environmentally preferred.

Facility Design and Construction

E-1 Best Management Practice

Objective: Protect subsistence use and access to subsistence hunting and fishing areas and minimize the impact of oil and gas activities on air, land, water, fish, and wildlife resources.

Requirement/Standard: All roads must be designed, constructed, maintained, and operated to create minimal environmental impacts and to protect subsistence use and access to subsistence hunting and fishing areas. The authorized officer will consult with appropriate federal, State, and North Slope Borough regulatory and resources agencies prior to approving construction of roads. Subject to approval by the authorized officer, the construction, operation, and maintenance of oil and gas field roads is the responsibility of the lessee unless the construction, operation, and maintenance of roads are assumed by the appropriate governing entity.

E-2 Lease Stipulation

Objective: Protect fish-bearing water bodies, water quality, and aquatic habitats.

Requirement/Standard: Permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited upon or within 500 feet as measured from the ordinary high water mark of fish-bearing waterbodies. Essential pipeline and road crossings will be permitted on a case-by-case basis. Note: Also refer to Stipulations/Best Management Practices K-1 and K-2. Construction camps are prohibited on frozen lakes and river ice. Siting of construction camps on river sand and gravel bars is allowed and 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.

E-3 Lease Stipulation

Objective: Maintain free passage of marine and anadromous fish and protect subsistence use and access to subsistence hunting and fishing.

Requirement/Standard: 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. Causeways, docks, artificial islands, and bottom-founded drilling structures shall be designed to ensure free passage of marine and anadromous fish and to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics. A monitoring program, developed in consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies, shall be required to address the objectives of water quality and free passage of fish.

E-4 Best Management Practice

Objective: Minimize the potential for pipeline leaks, the resulting environmental damage, and industrial accidents.

Requirement/Standard: All pipelines shall be designed, constructed, and operated under an authorized officer-approved Quality Assurance/Quality Control plan that is specific to the product transported and shall be constructed to accommodate the best available technology for detecting and preventing corrosion or mechanical defects during routine structural integrity inspections.

E-5 Best Management Practice

Objective: Minimize impacts of the development footprint.

Requirement/Standard: Facilities shall be designed and located to minimize the development footprint. Issues and methods that are to be considered include:

- a. use of maximum extended-reach drilling for production drilling to minimize the number of pads and the network of roads between pads;
- b. sharing facilities with existing development;
- c. collocation of all oil and gas facilities, except airstrips, docks, and seawater-treatment plants, with drill pads;
- d. integration of airstrips with roads;
- e. use of gravel-reduction technologies, e.g., insulated or pile-supported pads,
- f. coordination of facilities with infrastructure in support of offshore development.

Note: Where aircraft traffic is a concern, consideration shall be given to balancing gravel pad size and available supply storage capacity with potential reductions in the use of aircraft to support oil and gas operations.

E-6 Best Management Practice

Objective: Reduce the potential for ice-jam flooding, impacts to wetlands and floodplains, erosion, alteration of natural drainage patterns, and restriction of fish passage.

Requirement/Standard: Stream and marsh crossings shall be designed and constructed to ensure free passage of fish, reduce erosion, maintain natural drainage, and minimize adverse effects to natural stream flow. Note: Bridges, rather than culverts, are the preferred method for crossing rivers. When necessary, culverts can be constructed on smaller streams, if they are large enough to avoid restricting fish passage or adversely affecting natural stream flow.

E-7 Best Management Practice

Objective: Minimize disruption of caribou movement and subsistence use.

Requirement/Standard: Pipelines and roads shall be designed to allow the free movement of caribou and the safe, unimpeded passage of the public while participating in subsistence activities. Listed below are the accepted design practices:

- a. Above ground pipelines shall be elevated a minimum of 7 feet as measured from the ground to the bottom of the pipeline at vertical support members.

- b. In areas where facilities or terrain may funnel caribou movement, ramps over pipelines, buried pipelines, or pipelines buried under roads may be required by the authorized officer after consultation with federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility).
- c. A minimum distance of 500 feet between pipelines and roads shall be maintained. Separating roads from pipelines may not be feasible within narrow land corridors between lakes and where pipelines and roads converge on a drill pad. Where it is not feasible to separate pipelines and roads, alternative pipeline routes, designs and possible burial within the road will be considered by the authorized officer.

E-8 Best Management Practice

Objective: Minimize the impact of mineral materials mining activities on air, land, water, fish, and wildlife resources.

Requirement/Standard: Gravel mine site design and reclamation will be in accordance with a plan approved by the authorized officer. The plan shall be developed in consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies and consider:

- a. Locations outside the active flood plain.
- b. Design and construction of gravel mine sites within active flood plains to serve as water reservoirs for future use.
- c. Potential use of the site for enhancing fish and wildlife habitat.
- d. Potential storage and reuse of sod/overburden for the mine site or at other disturbed sites on the North Slope.

E-9 Best Management Practice

Objective: Avoidance of human-caused increases in populations of predators of ground nesting birds.

Requirement/Standard:

- a. Lessee shall utilize best available technology to prevent facilities from providing nesting, denning, or shelter sites for ravens, raptors, and foxes. The lessee shall provide the authorized officer with an annual report on the use of oil and gas facilities by ravens, raptors, and foxes as nesting, denning, and shelter sites.
- b. Feeding of wildlife is prohibited and will be subject to non-compliance regulations.

E-10 Best Management Practice

Objective: Prevention of migrating waterfowl, including species listed under the Endangered Species Act, from striking oil and gas and related facilities during low light conditions.

Requirement/Standard: Illumination of all structures between August 1 and October 31 shall be designed to direct artificial exterior lighting inward and downward, rather than upward and outward, unless otherwise required by the Federal Aviation Administration.

E-11 Best Management Practice

Objective: Minimize the take of species, particularly those listed under the Endangered Species Act and BLM Special Status Species, from direct or indirect interaction with oil and gas facilities.

Requirement/Standard: In accordance with the guidance below, before the approval of facility construction, aerial surveys of the following species shall be conducted within any area proposed for development.

Special Conditions in Spectacled and/or Steller's Eiders Habitats:

- a. Surveys shall be conducted by the lessee for at least 3 years before authorization of construction, if such construction is within the USFWS North Slope eider survey area and at least 1 year outside that area. Results of aerial surveys and habitat mapping may require additional ground nest surveys. Spectacled and/or Steller's eider surveys shall be conducted following accepted BLM-protocol. Information gained from these surveys shall be used to make infrastructure siting decisions as discussed in subparagraph b, below.
- b. If spectacled and/or Steller's eiders are determined to be present within the proposed development area, the applicant shall work with the USFWS and BLM early in the design process to site roads and facilities in order to minimize impacts to nesting and brood-rearing eiders and their preferred habitats. Such consultation shall address timing restrictions and other temporary mitigating measures, location of permanent facilities, placement of fill, alteration of eider habitat, aircraft operations, and management of high noise levels.
- c. To reduce the possibility of spectacled and/or Steller's eiders or other birds colliding with above-ground utility lines (power and communication), such lines shall either be buried in access roads or suspended on vertical support members except in rare cases which are to be few in number and limited in extent. Exceptions are limited to the following situations, and must be reported to the USFWS when exceptions are authorized:

1. Overhead power or communication lines may be allowed when located entirely within the boundaries of a facility pad;
 2. Overhead power or communication lines may be allowed when engineering constraints at the specific and limited location make it infeasible to bury or connect the lines to a vertical support member; or
 3. Overhead power or communication lines may be allowed in situations when human safety would be compromised by other methods.
- d. To reduce the likelihood of spectacled and/or Steller's eiders or other birds colliding with communication towers, towers should be located, to the extent practicable, on existing pads and as close as possible to buildings or other structures, and on the east or west side of buildings or other structures if possible. Support wires associated with communication towers, radio antennas, and other similar facilities, should be avoided to the extent practicable. If support wires are necessary, they should be clearly marked along their entire length to improve visibility to low flying birds. Such markings shall be developed through consultation with the USFWS.

Special Conditions in Yellow-billed Loon Habitats:

- e. Aerial surveys shall be conducted by the lessee for at least 3 years before authorization of construction of facilities proposed for development which are within 1 mile of a lake 25 acres or larger in size. These surveys along shorelines of large lakes shall be conducted following accepted BLM protocol during nesting in late June and during brood rearing in late August.
- f. Should yellow-billed loons be present, the design and location of facilities must be such that disturbance is minimized. The default standard mitigation is a 1-mile buffer around all recorded nest sites and a minimum 1,625-foot (500-meter) buffer around the remainder of the shoreline. Development will generally be prohibited within buffers unless no other option exists.

Protections for Birds

- g. To reduce the possibility of birds colliding with above-ground utility lines (power and communication), such lines shall either be buried in access roads or suspended on vertical support members except in rare cases, which are to be few in number and limited in extent. Exceptions are limited to the following situations:
 1. Overhead power or communication lines may be allowed when located entirely within the boundaries of a facility pad;

2. Overhead power or communication lines may be allowed when engineering constraints at the specific and limited location make it infeasible to bury or connect the lines to a vertical support member; or
 3. Overhead power or communication lines may be allowed in situations when human safety would be compromised by other methods.
- h. To reduce the likelihood of birds colliding with communication towers, towers should be located, to the extent practicable, on existing pads and as close as possible to buildings or other structures, and on the east or west side of buildings or other structures if possible. Support wires associated with communication towers, radio antennas, and other similar facilities, should be avoided to the extent practicable. If support wires are necessary, they should be clearly marked along their entire length to improve visibility to low-flying birds. Such markings shall be developed through consultation with the USFWS.

E-12 Best Management Practice

Objective: Use ecological mapping as a tool to assess wildlife habitat before development of permanent facilities to conserve important habitat types during development.

Requirement/Standard: An ecological land classification map of the development area shall be developed before approval of facility construction. The map will integrate geomorphology, surface form, and vegetation at a scale, level of resolution, and level of positional accuracy adequate for detailed analysis of development alternatives. The map shall be prepared in time to plan one season of ground-based wildlife surveys, if deemed necessary by the authorized officer, before approval of the exact facility location and facility construction.

E-13 Best Management Practice

Objective: Protect cultural and paleontological resources.

Requirement/Standard: 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 authorized officer and suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer.

E-14 Best Management Practice

Objective: Ensure the passage of fish at stream crossings.

Requirement/Standard: To ensure that crossings provide for fish passage, all proposed crossing designs shall adhere to the best management practices outlined in “Stream Crossing Design Procedure for Fish Streams on the North Slope Coastal Plain” by McDonald et al. (1994), “Fundamentals of Culvert Design for Passage of Weak-Swimming Fish” by Behlke et al. (1991), and other generally accepted best management procedures prescribed by the authorized officer. To adhere to these best management practices, at least 3 years of hydrologic and fish data shall be collected by the lessee for any proposed crossing of a stream whose structure is designed to occur, wholly or partially, below the stream’s ordinary high watermark. These data shall include, but are not limited to, the range of water levels (highest and lowest) at the location of the planned crossing, and the seasonal distribution and composition of fish populations using the stream.

E-15 Best Management Practice

Objective: Prevent or minimize the loss of nesting habitat for cliff nesting raptors.

Requirement/Standard:

- a. Removal of greater than 100 cubic yards of bedrock outcrops, sand, and/or gravel from cliffs shall be prohibited.
- b. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs.

E-16 Best Management Practice

Objective: Prevent or minimize the loss of raptors due to electrocution by power lines.

Requirement/Standard: Comply with the most up-to-date industry-accepted suggested practices for raptor protection on power lines. Current accepted standards were published in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* by the Avian Power Line Interaction Committee and are updated as needed.

E-17 Best Management Practice

Objective: Manage permitted activities to meet Visual Resource Management class objectives described below.

Class I: Natural ecological changes and very limited management activity are allowed. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not dominate the view of the casual observer. Any changes should repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III: The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV: The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize impacts through location and design by repeating form, line, color, and texture.

Requirement/Standard: At the time of application for construction of permanent facilities, the lessee/permittee shall, after consultation with the authorized officer, submit a plan to best minimize visual impacts, consistent with the Visual Resource Management class for the lands on which facilities would be located. A photo simulation of the proposed facilities may be a necessary element of the plan.

E-18 Best Management Practice

Objective: Avoid and reduce temporary impacts to productivity from disturbance near Steller's and/or spectacled eider nests.

Requirement/Standard: Ground-level activity (by vehicle or on foot) within 200 meters of occupied Steller's and/or spectacled eider nests, from June 1 through August 15, will be restricted to existing thoroughfares, such as pads and roads. Construction of permanent facilities, placement of fill, alteration of habitat, and introduction of high noise levels within 200 meters of occupied Steller's and/or spectacled eider nests will be prohibited. In instances where summer (June 1 through August 15) support/construction activity must occur off existing thoroughfares, USFWS-approved nest surveys must be conducted during mid-June prior to the approval of the activity. Collected data will be used to evaluate whether the action could occur based on employment of a 200-meter buffer around nests or if the activity would be delayed until after mid-August once ducklings are mobile

and have left the nest site. Also, in cases in which oil spill response training is proposed to be conducted within 200 meters of shore in riverine, marine, or inter-tidal areas, the BLM will work with the USFWS to schedule the training at a time that is not a sensitive nesting/brood-rearing period or require that nest surveys be conducted in the training area prior to the rendering a decision on approving the training. The protocol and timing of nest surveys for Steller's and/or spectacled eiders will be determined in cooperation with the USFWS, and must be approved by the USFWS. Surveys should be supervised by biologists who have previous experience with Steller's and/or spectacled eider nest surveys.

E-19 Best Management Practice

Objective: Provide information to be used in monitoring and assessing wildlife movements during and after construction.

Requirement/Standard: A representation, in the form of ArcGIS-compatible shape-files, of all new infrastructure construction shall be provided to the authorized officer. During the planning and permitting phase, shape-files representing proposed locations shall be provided. Within 6 months of construction completion, shape-files (within GPS accuracy) of all new infrastructure shall be provided. Infrastructure includes all gravel roads and pads, facilities built on pads, pipelines and independently constructed powerlines (as opposed to those incorporated in pipeline design). Gravel pads shall be included as polygon feature. Roads, pipelines, and powerlines may be represented as line features but must include ancillary data to denote width, number pipes, etc. Poles for power lines may be represented as point features. Ancillary data shall include construction beginning and ending dates.

Use of Aircraft for Permitted Activities

F-1 Best Management Practice

Objective: Minimize the effects of low-flying aircraft on wildlife, subsistence activities, and local communities.

Requirement/Standard: The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines (Note: This best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objectives of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.):

- a. Aircraft shall maintain an altitude of at least 1,500 feet above ground level when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and an altitude of at least 1,500 feet above ground level when within ½ mile of known gyrfalcon nest sites from March 15 to August 15, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from the BLM necessary to plan flight routes when routes may go near falcon nests.
- b. Aircraft shall maintain an altitude of at least 1,000 feet above ground level (except for takeoffs and landings) over caribou winter ranges from December 1 through May 1, unless doing so would endanger human life or violate safe flying practices. Caribou wintering areas will be defined annually by the authorized officer. The BLM will consult directly with the Alaska Department of Fish and Game in annually defining caribou winter ranges.
- c. Land user shall submit an aircraft use plan as part of an oil and gas exploration or development proposal. The plan shall address strategies to minimize impacts to subsistence hunting and associated activities, including but not limited to the number of flights, type of aircraft, and flight altitudes and routes, and shall also include a plan to monitor flights. Proposed aircraft use plans should be reviewed by appropriate federal, State, and borough agencies. Consultations with these same agencies will be required if unacceptable disturbance is identified by subsistence users. Adjustments, including possible suspension of all flights, may be required by the authorized officer if resulting disturbance is determined to be unacceptable. The number of takeoffs and landings to support oil and gas operations with necessary materials and supplies should be limited to the maximum extent possible. During the design of proposed oil and gas facilities, larger landing strips and storage areas should be considered to allow larger aircraft to be employed, resulting in fewer flights to the facility.
- d. Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods (spring goose hunting and fall caribou and moose hunting) should be kept to a minimum.
- e. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet above ground level (except for takeoffs and landings) over the Teshekpuk Lake Caribou Habitat Area (Map 2) from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices. Aircraft use (including fixed wing and

- helicopter) by oil and gas lessees in the Goose Molting Area (Map 2) should be minimized from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices.
- f. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet above ground level (except for takeoffs and landings) over the Utukok River Uplands Special Area (Map 2) from May 20 through August 20, unless doing so would endanger human life or violate safe flying practices.
 - g. Hazing of wildlife by aircraft is prohibited. Pursuit of running wildlife is hazing. If wildlife begins to run as an aircraft approaches, the aircraft is too close and must break away.
 - h. Fixed wing aircraft used as part of a BLM-authorized activity along the coast shall maintain minimum altitude of 2,000 feet when within a ½-mile of walrus haulouts, unless doing so would endanger human life or violate safe flying practices. Helicopters used as part of a BLM-authorized activity along the coast shall maintain minimum altitude of 3,000 feet and a 1-mile buffer from walrus haulouts, unless doing so would endanger human life or violate safe flying practices.
 - i. Aircraft used as part of a BLM-authorized activity along the coast and shore fast ice zone shall maintain minimum altitude of 3,000 feet when within 1 mile from aggregations of seals, unless doing so would endanger human life or violate safe flying practices.

Oil Field Abandonment

G-1 Lease Stipulation

Objective: Ensure long-term reclamation of land to its previous condition and use.

Requirement/Standard: Prior to final abandonment, land used for oil and gas infrastructure—including but not limited to well pads, production facilities, access roads, and airstrips—shall be reclaimed to ensure eventual restoration of ecosystem function. The leaseholder shall develop and implement an abandonment and reclamation plan approved by the BLM. The plan shall describe short-term stability, visual, hydrological, and productivity objectives and steps to be taken to ensure eventual ecosystem restoration to the land's previous hydrological, vegetative, and habitat condition. The BLM may grant exceptions to satisfy stated environmental or public purposes.

Subsistence Consultation for Permitted Activities

H-1 Best Management Practice

Objective: Provide opportunities for participation in planning and decision making to prevent unreasonable conflicts between subsistence uses and other activities.

Requirement/Standard: Lessee/permittee shall consult directly with affected communities using the following guidelines:

- a. Before submitting an application to the BLM, the applicant shall consult with directly affected subsistence communities, the North Slope Borough, and the National Petroleum Reserve-Alaska Subsistence Advisory Panel to discuss the siting, timing, and methods of their proposed operations to help discover local traditional and scientific knowledge, resulting in measures that minimize impacts to subsistence uses. Through this consultation, the applicant shall make every reasonable effort, including such mechanisms as conflict avoidance agreements and mitigating measures, to ensure that proposed activities will not result in unreasonable interference with subsistence activities. In the event that no agreement is reached between the parties, the authorized officer shall consult with the directly involved parties and determine which activities will occur, including the timeframes.
- b. The applicant shall submit documentation of consultation efforts as part of its operations plan. Applicants should submit the proposed plan of operations to the National Petroleum Reserve-Alaska Subsistence Advisory Panel for review and comment. The applicant must allow time for the BLM to conduct formal government-to-government consultation with Native Tribal governments if the proposed action requires it.
- c. A plan shall be developed that shows how the activity, in combination with other activities in the area, will be scheduled and located to prevent unreasonable conflicts with subsistence activities. The plan will also describe the methods used to monitor the effects of the activity on subsistence use. The plan shall be submitted to the BLM as part of the plan of operations. The plan should address the following items:
 1. A detailed description of the activity(ies) to take place (including the use of aircraft).
 2. A description of how the lessee/permittee will minimize and/or deal with any potential impacts identified by the authorized officer during the consultation process.

3. A detailed description of the monitoring effort to take place, including process, procedures, personnel involved and points of contact both at the work site and in the local community.
 4. Communication elements to provide information on how the applicant will keep potentially affected individuals and communities up-to-date on the progress of the activities and locations of possible, short-term conflicts (if any) with subsistence activities. Communication methods could include holding community meetings, open house meetings, workshops, newsletters, radio and television announcements, etc.
 5. Procedures necessary to facilitate access by subsistence users to the permittees' area of activity or facilities during the course of conducting subsistence activities.
- d. During development, monitoring plans must be established for new permanent facilities, including pipelines, to assess an appropriate range of potential effects on resources and subsistence as determined on a case-by-case basis given the nature and location of the facilities. The scope, intensity, and duration of such plans will be established in consultation with the authorized officer and NPR-A Subsistence Advisory Panel.
 - e. Permittees that propose barging facilities, equipment, supplies, or other materials to NPR-A in support of oil and gas activities in the NPR-A shall notify, confer, and coordinate with the Alaska Eskimo Whaling Commission, the appropriate local community whaling captains' associations, and the North Slope Borough to minimize impacts from the proposed barging on subsistence whaling activities.
 - f. Barge operators requiring a BLM permit are required to demonstrate that barging activities will not have unmitigable adverse impacts on the availability of marine mammals to subsistence hunters.
 - g. All vessels over 50 ft. in length engaged in operations requiring a BLM permit must have an Automatic Identification System (AIS) transponder system on the vessel.

H-2 Best Management Practice

Objective: Prevent unreasonable conflicts between subsistence activities and geophysical (seismic) exploration.

Requirement/Standard: In addition to the consultation process described in Best Management Practice H-1 for permitted activities, before activity to conduct geophysical (seismic) exploration commences, applicants shall notify the local search and rescue organizations of proposed seismic survey

locations for that operational season. For the purpose of this standard, a potentially affected cabin/campsite is defined as any camp or campsite used for subsistence purposes and located within the boundary of the area subject to proposed geophysical exploration and/or within 1 mile of actual or planned travel routes used to supply the seismic operations while it is in operation.

- a. Because of the large land area covered by typical geophysical operations and the potential to impact a large number of subsistence users during the exploration season, the permittee/operator will notify all potentially affected subsistence-use cabin and campsite users.
- b. The official recognized list of subsistence-use cabin and campsite users is the North Slope Borough's most current inventory of cabins and campsites, which have been identified by the subsistence users' names.
- c. A copy of the notification, a map of the proposed exploration area, and the list of potentially affected users shall also be provided to the office of the appropriate Native Tribal government.
- d. The authorized officer will prohibit seismic work within 1 mile of any known subsistence-use cabin or campsite unless an alternate agreement between the cabin/campsite owner/user is reached through the consultation process and presented to the authorized officer. (Regardless of the consultation outcome, the authorized officer will prohibit seismic work within 300 feet of a known subsistence-use cabin or campsite.)
- e. The permittee shall notify the appropriate local search and rescue (e.g., Nuiqsut Search and Rescue, Atqasuk Search and Rescue) of their current operational location within the NPR-A on a weekly basis. This notification should include a map indicating the current extent of surface use and occupation, as well as areas previously used/occupied during the course of the operation in progress. The purpose of this notification is to allow hunters up-to-date information regarding where seismic exploration is occurring, and has occurred, so that they can plan their hunting trips and access routes accordingly. Identification of the appropriate search and rescue offices to be contacted can be obtained from the coordinator of the NPR-A Subsistence Advisory Panel in the BLM's Arctic Field Office.

H-3 Best Management Practice

Objective: Minimize impacts to sport hunting and trapping species and to subsistence harvest of those animals.

Requirement/Standard: Hunting and trapping by lessee's/permittee'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 or community (e.g., Fairbanks, Barrow, Nuiqsut, or Deadhorse). Use of lessee/permittee facilities, equipment, or transport for personal access or aid in hunting and trapping is prohibited.

Orientation Programs Associated with Permitted Activities***I-1 Best Management Practice***

Objective: Minimize cultural and resource conflicts.

Requirement/Standard: All personnel involved in oil and gas and related activities shall be provided information concerning applicable stipulations, best management practices, standards, and specific types of environmental, social, traditional, and cultural concerns that relate to the region. The lessee/permittee shall ensure that all personnel involved in permitted activities shall attend an orientation program at least once a year. The proposed orientation program shall be submitted to the authorized officer for review and approval and should:

- a. provide sufficient detail to notify personnel of applicable stipulations and best management practices as well as inform individuals working on the project of specific types of environmental, social, traditional and cultural concerns that relate to the region.
- b. 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.
- c. Include guidance on the preparation, production, and distribution of information cards on endangered and/or threatened species.
- d. Be designed to increase sensitivity and understanding of personnel to community values, customs, and lifestyles in areas in which personnel will be operating.
- e. Include information concerning avoidance of conflicts with subsistence, commercial fishing activities, and pertinent mitigation.

- f. Include information for aircraft personnel concerning subsistence activities and areas/seasons that are particularly sensitive to disturbance by low-flying aircraft. Of special concern is aircraft use near traditional subsistence cabins and campsites, flights during spring goose hunting and fall caribou and moose hunting seasons, and flights near North Slope communities.
- g. Provide that individual training is transferable from one facility to another except for elements of the training specific to a particular site.
- h. Include on-site records 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.
- i. Include a module discussing bear interaction plans to minimize conflicts between bears and humans.
- j. Provide a copy of 43 CFR 3163 regarding Non-Compliance Assessment and Penalties to on-site personnel.
- k. Include training designed to ensure strict compliance with local and corporate drug and alcohol policies. This training should be offered to the North Slope Borough Health Department for review and comment.
- l. Include training developed to train employees on how to prevent transmission of communicable diseases, including sexually transmitted diseases, to the local communities. This training should be offered to the North Slope Borough Health Department for review and comment.

Endangered Species Act—Section 7 Consultation Process

J. The lease areas may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or to have some other special status. The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activities that will contribute to the need to list such a species or their habitat. The BLM may require modifications to or disapprove a proposed activity that is likely to adversely affect a proposed or listed endangered species, threatened species, or critical habitat. The BLM will not approve any activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 USC § 1531 et seq., including completion of any required procedure for conference or consultation.

Additional Protections that Apply in Select Biologically Sensitive Areas

K-1 Lease Stipulation/Best Management Practice – Rivers

Note: This measure would be applied to relevant new leases. On lands unavailable for leasing in the respective alternatives, K-1 would be a best management practice. The decision indicated below in subparagraphs (a) and (d) modify Protection 1 of the Colville River Special Area Management Plan by widening its applicability to 2 miles.

Objective: Minimize the disruption of natural flow patterns and changes to water quality; the disruption of natural functions resulting from the loss or change to vegetative and physical characteristics of floodplain and riparian areas; the loss of spawning, rearing or over-wintering habitat for fish; the loss of cultural and paleontological resources; the loss of raptor habitat; impacts to subsistence cabin and campsites; the disruption of subsistence activities; and impacts to scenic and other resource values.

Requirement/Standard: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the streambed and adjacent to the rivers listed below at the distances identified. (Gravel mines may be located within the active floodplain consistent with Best Management Practice E-8). On a case-by case basis, and in consultation with federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings to the main channel will be permitted through setback areas. The below setbacks may not be practical within river deltas; in such deltas, permanent facilities shall be designed to withstand a 200-year flood event. In the below list, if no upper limit for the setback is indicated, the setback extends to the head of the stream as identified in the National Hydrography Dataset.

- a. **Colville River:** a 2-mile setback from the boundary of NPR-A where the river determines the boundary along the Colville River as determined by cadastral survey to be the highest high watermark on the left (western or northern) bank and from both banks' ordinary high watermark where BLM-manages both sides of the river up through T5S, R30W, U.M. Above that point to its source at the juncture of Thunder and Storm creeks the setback will be ½ mile. Note: The planning area excludes conveyed Native lands along the lower reaches of the Colville River. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. Note: This provision does not apply to intercommunity or other permanent roads

constructed with public funds for general transportation purposes, though the BLM would encourage minimal use of the setback area. This preserves the opportunity to plan, design, and construct public transportation systems to meet the economic, transportation, and public health and safety needs of the State of Alaska and/or communities within National Petroleum Reserve-Alaska.

- b. **Ikpikpuk River:** a 2-mile setback from of the ordinary high watermark of the Ikpiuk River extending from the mouth upstream through T7 N, R11W, U.M.; above that the setback would be for 1 mile to the confluence of the Kigalik River and Maybe Creek.
- c. **Miguakiak River:** a ½-mile setback from the ordinary high watermark.
- d. **Kikiakrorak and Kogosukruk Rivers:** A 2-mile setback from the top of the bluff (or ordinary high watermark if there is no bluff) on the Kikiakrorak River downstream from T2N., R4W, U.M. and on the Kogosukruk River (including Branch of Kogosukruk River, Henry Creek, and two unnamed tributaries off the southern bank) downstream from T2N, R3W, U.M. The setback from these streams in the named townships and further upstream as applicable will be a ½-mile from the top of the bluff or bank if there is no bluff.
- e. **Fish Creek:** a 3-mile setback from the highest high watermark of the creek downstream from the eastern edge of section 31, T11N, R1E., U.M. and a ½-mile setback from the bank's highest high watermark farther upstream.
- f. **Judy Creek:** a ½-mile setback from the ordinary high watermark.
- g. **Ublutuooh (Tinmiasiqsiugvik) River:** a ½-mile setback from the ordinary high water mark.
- h. **Alaktak River:** a 1-mile setback from the ordinary high water mark.
- i. **Chipp River:** a 1-mile setback from the ordinary high water mark.
- j. **Oumalik River:** a ½-mile setback from the Oumalik River ordinary high water mark from the mouth upstream to section 5, T8N, R14W, U.M., and a ½ mile setback in and above section 5, T8N, R14W, U.M.
- k. **Titaluk River:** a 2-mile setback from the ordinary high water mark from its confluence with the Ikpiuk River upstream through T7N, R12W, U.M.; above that point the setback would be ½-mile from the ordinary high water mark.
- l. **Kigalik River:** a ½-mile setback from the ordinary high water mark.
- m. **Maybe Creek:** a ½-mile setback from the ordinary high water mark.
- n. **Topagoruk River:** a 1-mile setback from the ordinary high water mark.

- o. **Ishuktak Creek:** a ½-mile setback from the ordinary high water mark.
- p. **Meade River:** a 1-mile setback from the ordinary high water mark on BLM-managed lands.
- q. **Usuktuk River:** a 1-mile setback from the ordinary high water mark on BLM-managed lands.
- r. **Pikroka Creek:** a ½-mile setback from the ordinary high water mark.
- s. **Nigisaktuvik River:** a 1-mile setback from the ordinary high water mark.
- t. **Inaru River:** a 1-mile setback from the ordinary high water mark.
- u. **Kucheak Creek:** a ½-mile setback from the ordinary high water mark.
- v. **Avalik River:** a 1-mile setback from the ordinary high water mark.
- w. **Niklavik Creek:** a ½-mile setback from the ordinary high water mark.
- x. **Kugrua River:** a ½-mile setback from the ordinary high water mark.
- y. **Kungok River:** a 1-mile setback from the ordinary high water mark on BLM-managed lands.
- z. **Kolipsun Creek:** a ½-mile setback from the ordinary high water mark upstream through T13N, R28W, U.M.
- aa. **Maguriak Creek:** a ½-mile setback from the ordinary high water mark upstream through T12N, R29W, U.M.
- ab. **Mikigealiak River:** a ½-mile setback from the ordinary high water mark upstream through T12N, R30W, U.M.
- ac. **Kuk River:** a 1-mile setback from the ordinary high water mark on BLM-managed lands.
- ad. **Ketik River:** a 1-mile setback from the ordinary high water mark.
- ae. **Kaolak River:** a 1-mile setback from the ordinary high water mark.
- af. **Ivisaruk River:** a 1-mile setback from the ordinary high water mark.
- ag. **Nokotlek River:** a ½-mile setback from the ordinary high water mark.
- ah. **Ongorakvik River:** a ½-mile setback from the ordinary high water mark.
- ai. **Tunalik River:** a ½-mile setback from the ordinary high water mark.
- aj. **Avak River:** a ½-mile setback from the ordinary high water mark within the NPR-A.
- ak. **Nigu River:** a ½-mile setback from the ordinary high water mark from the confluence with the Etivluk River upstream to the boundary of NPR-A
- al. **Etivluk River:** a ½-mile setback from the ordinary high water mark.
- am. **Ipnarvik River:** a ½-mile setback from the ordinary high water mark.
- an. **Kuna River:** a ½-mile setback from the ordinary high water mark.
- ao. **Kiligwa River:** a ½-mile setback from the ordinary high water mark.

- ap. **Nuka River:** a ½-mile setback from the ordinary high water mark.
- aq. **Driftwood Creek:** a ½-mile setback from the ordinary high water mark.
- ar. **Utukok River:** a 1-mile setback from the ordinary high water mark within the NPR-A.
- as. **Awuna River:** a ½-mile setback from the ordinary high water mark.
- at. **Carbon Creek:** a ½-mile setback from the ordinary high water mark.
- au. **Kokolik River:** a 1-mile setback from the ordinary high water mark within the NPR-A.
- av. **Keolok Creek:** a ½-mile setback from the ordinary high water mark.

The decisions in subparagraphs K-1(a) and K-1(d) modify Colville River Management Plan Protection 1 by widening the setback in that measure to 2 miles. Protection 1 thus is modified to the following:

Colville River Special Area Management Plan-Protection 1

Objective: Minimize the loss of arctic peregrine falcon nesting habitat in the Colville River Special Area.

Requirement/Standard: To minimize the direct loss of arctic peregrine falcon nesting habitat and to protect nest sites in the Colville River Special Area the following protective measures apply: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the stream bed and adjacent to the rivers listed below at the distances identified. On a case-by-case basis, and in consultation with federal, State, and North Slope Borough regulatory and resource agencies (as appropriate; based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings perpendicular to the main channel will be permitted through setback areas.

- a. Colville River: downstream of the Etivluk River a continuous 2-mile setback measured from the highest high watermark on the left bank (facing downstream); upstream of the Etivluk River a 2-mile setback measured from the ordinary high watermark of the bank on both sides of the river. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes.
- b. Kikiakrorak River: downstream from T2N, R4W, U.M., a continuous 2-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river.

- c. Kogosukruk River: downstream from T2N, R3W, U.M., a continuous 2-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river and several of its tributaries.

K-2 Lease Stipulation/Best Management Practice – Deep Water Lakes

Note: This measure would be applied to relevant new leases. On lands unavailable for leasing, K-2 would be a best management practice.

Objective: Minimize the disruption of natural flow patterns and changes to water quality; the disruption of natural functions resulting from the loss or change to vegetative and physical characteristics of deep water lakes; the loss of spawning, rearing or over wintering habitat for fish; the loss of cultural and paleontological resources; impacts to subsistence cabin and campsites; and the disruption of subsistence activities.

Requirement/Standard: Generally, permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited on the lake or lakebed and within ¼ mile of the ordinary high water mark of any deep lake as determined to be in lake zone III (i.e., depth greater than 13 feet [4 meters]; Mellor 1985). On a case-by-case basis in consultation with federal, State and North Slope Borough regulatory and resource agencies (as appropriate based on agency legal authority and jurisdictional responsibility), essential pipeline(s), road crossings, and other permanent facilities may be considered through the permitting process in these areas where the lessee can demonstrate on a site-specific basis that impacts will be minimal.

K-3 Best Management Practice – Kogru River, Dease Inlet, Admiralty Bay, Elson Lagoon, Peard Bay, Wainwright Inlet/Kuk River, and Kasegaluk Lagoon, and their associated Islands

Note: None of the area is available for oil and gas leasing or exploratory drilling. Therefore, K-3 will apply as a best management practice.

Objective: Protect fish and wildlife habitat (including, but not limited to, that for waterfowl and shorebirds, caribou insect-relief, and marine mammals), preserve air and water quality, and minimize impacts to subsistence activities and historic travel routes on the major coastal waterbodies.

Requirement/Standard (Development): With the exception of linear features such as pipelines, no permanent oil and gas facilities are permitted on or under the water within ¾ mile seaward of the shoreline (as measured from mean high tide) of the major coastal waterbodies or the natural coastal islands (to the extent that the seaward subsurface is within NPR-A). Elsewhere, permanent facilities within the major coastal waterbodies will

only be permitted on or under the water if they can meet all the following criteria:

- a. Design and construction of facilities shall minimize impacts to subsistence uses, travel corridors, seasonally concentrated fish and wildlife resources.
- b. Daily operational activities, including use of support vehicles, watercraft, and aircraft traffic, alone or in combination with other past, present, and reasonably foreseeable activities, shall be conducted to minimize impacts to subsistence uses, travel corridors, and seasonally concentrated fish and wildlife resources.
- c. The location of oil and gas facilities, including artificial islands, platforms, associated pipelines, ice or other roads, bridges or causeways, shall be sited and constructed so as to not pose a hazard to navigation by the public using traditional high-use subsistence-related travel routes into and through the major coastal waterbodies as identified by the North Slope Borough.
- d. Demonstrated year-round oil spill response capability, including the capability of adequate response during periods of broken ice or open water, or the availability of alternative methods to prevent well blowouts during periods when adequate response capability cannot be demonstrated. Such alternative methods may include seasonal drilling restrictions, improvements in blowout prevention technology, equipment and/or changes in operational procedures, and “top-setting” of hydrocarbon-bearing zones.
- e. Reasonable efforts will be made to avoid or minimize impacts related to oil spill response activities, including vessel, aircraft, and pedestrian traffic that add to impacts or further compound “direct spill” related impacts on area resources and subsistence uses.
- f. Before conducting open water activities, the permittee shall consult with the Alaska Eskimo Whaling Commission and the North Slope Borough to minimize impacts to the fall and spring subsistence whaling activities of the communities of the North Slope.

K-4a Best Management Practice – Goose Molting Area

Note: Except for less than 10,000 acres east of the mouth of the Ikpiuk River, new non-subsistence infrastructure would be prohibited in the goose molting area. None of the area is available for oil and gas leasing or exploratory drilling.

Objective: Minimize disturbance to molting geese and loss of goose molting habitat in and around lakes in the Goose Molting Area.

Requirement/Standard (General): Within the Goose Molting Area no permanent oil and gas facilities, except for pipelines, will be allowed within 1 mile of the shoreline of goose molting lakes. No waiver, exception, or modification will be considered. Prior to the permitting of a pipeline in the Goose Molting Area, a workshop will be convened to determine the best corridor for pipeline construction in efforts to minimize impacts to wildlife and subsistence resources. The workshop participants will include but will not be limited to federal, state, and North Slope Borough representatives. In addition, only “in field” roads will be authorized as part of oil and gas field development.

Requirement/Standard (Development): In the Goose Molting Area, the following standards will be followed for permitted activities:

- a. Within the Goose Molting Area from June 15 through August 20, all off-pad activities and major construction activities using heavy equipment (e.g., sand/gravel extraction and transport, pipeline and pad construction, but not drilling from existing production pads) shall be suspended (see also Best Management Practice K-5(d)), unless approved by the authorized officer in consultation with the appropriate federal, State, and North Slope Borough regulatory and resource agencies. The intent of this requirement is to restrict activities that will disturb molting geese during the period when geese are present.
- b. Water extraction from any lakes used by molting geese shall not alter hydrological conditions that could adversely affect identified goose-feeding habitat along lakeshore margins. Considerations will be given to seasonal use by operators (generally in winter) and geese (generally in summer), as well as recharge to lakes from the spring snowmelt.
- c. Oil and gas activities will avoid altering (i.e., damage or disturbance of soils, vegetation, or surface hydrology) critical goose-feeding habitat types along lakeshore margins (grass/sedge/moss) and salt marsh habitats.
- d. Permanent oil and gas facilities (including gravel roads, pads, and airstrips, but excluding pipelines) and material sites will be sited outside the identified buffers and restricted surface occupancy areas. Additional limits on development footprint apply
- e. Between June 15 and August, 20 within the Goose Molting Area, oil and gas facilities shall incorporate features (e.g., temporary fences, siting/orientation) that screen/shield human activity from view of any Goose Molting Area lake, as identified by the authorized officer in

consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies.

- f. Strategies to minimize ground traffic shall be implemented from June 15 through August 20. These strategies may include limiting trips, use of convoys, different vehicle types, etc. to the extent practicable. The permittee shall submit with the development proposal a vehicle use plan that considers these and any other mitigation. The vehicle use plan shall also include a vehicle-use monitoring plan. Adjustments will be required by the authorized officer if resulting disturbance is determined to be unacceptable.
- g. Within the Goose Molting Area aircraft use (including fixed wing and helicopter) shall be restricted from June 15 through August 20 unless doing so endangers human life or violates safe flying practices. Restrictions may include: (1) limiting flights to two round-trips/week, and (2) limiting flights to corridors established by the BLM after discussions with appropriate federal, State, and North Slope Borough regulatory and resource agencies. The permittee shall submit with the development proposal an aircraft use plan that considers these and other mitigation. The aircraft use plan shall also include an aircraft monitoring plan. Adjustments, including perhaps suspension of all aircraft use, will be required by the authorized officer if resulting disturbance is determined to be unacceptable. Note: This site-specific best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.
- h. Any permit for development issued under this IAP/EIS will include a requirement for the permittee to conduct monitoring studies necessary to adequately determine consequences of development and any need for change to mitigations. Monitoring studies will be site- and development-specific within a set of over-arching guidelines developed by the BLM after conferring with appropriate federal, State, North Slope Borough agencies. The study(ies) will include the construction period and will continue for a minimum of 3 years after construction has been completed and production has begun. The monitoring studies will be a continuation of evaluating the effectiveness of Best Management Practice K-4a's requirements in meeting the objective of K-4a and determine if any changes to the best management practice or any project specific mitigation(s) are

necessary. If changes are determined to be necessary, the BLM, with the permittee and/or their representative, will conduct an assessment of the feasibility of altering development operation (e.g., reduced human activity, visibility barriers, noise abatement). Any changes determined necessary will be implemented prior to authorization of any new construction.

K-4b Best Management Practice – Brant Survey Area

Objective: Minimize the loss or alteration of habitat for, or disturbance of, nesting and brood rearing brant in the Brant Survey Area. None of the area is available for oil and gas leasing or exploratory drilling.

Requirement/Standard:

- a. Aerial surveys for brant nesting colonies and brood-rearing areas shall be conducted for a minimum of 2 years before authorization of construction of permanent facilities. At a minimum, the survey area shall include the proposed development site(s) (i.e., the footprint) and the surrounding ½-mile area. These surveys shall be conducted following accepted BLM protocol.
- b. Development may be prohibited or activities curtailed within ½-mile of all identified brant nesting colonies and brood-rearing areas identified during the 2-year survey

K-5 Best Management Practice – Teshekpuk Lake Caribou Habitat Area

Note: None of the area is available for oil and gas leasing or exploratory drilling. Therefore, K-5 will apply as a best management practice. Portions of K-5 that apply to permanent infrastructure are only relevant to the portion of the Teshekpuk Lake Caribou Habitat Area available to application for such infrastructure, i.e., to those areas outside of the approximately 1.1 million acres near the lake where no new non-subsistence permanent infrastructure will be permitted.

Objective: Minimize disturbance and hindrance of caribou, or alteration of caribou movements through portions the Teshekpuk Lake Caribou Habitat Area that are essential for all season use, including calving and rearing, insect-relief, and migration.

Requirement/Standard: In the Teshekpuk Lake Caribou Habitat Area the following standards will be applied to permitted activities:

- a. Before authorization of construction of permanent facilities (limited as they may be by surface occupancy restrictions established in this decision), the permittee shall design and implement and report a study of caribou movement unless an acceptable study(s) specific to the

Teshekpuk Caribou Herd has been completed within the last 10 years. The study shall include a minimum of four years of current data on the Teshekpuk Caribou Herd movements and the study design shall be approved by the authorized officer in consultation with the appropriate federal, State, and North Slope Borough wildlife and resource agencies. The study should provide information necessary to determine facility (including pipeline) design and location. Permittee may submit individual study proposals or they may combine with other permittees in the area to do a single, joint study for the entire Teshekpuk Lake Caribou Habitat Area. Study data may be gathered concurrently with other activities as approved by the authorized officer and in consultation with the appropriate federal, State, and North Slope Borough wildlife and resource agencies. A final report of the study results will be prepared and submitted. Prior to the permitting of a pipeline in the Teshekpuk Lake Caribou Habitat Area, a workshop will be convened to identify the best corridor for pipeline construction in efforts to minimize impacts to wildlife (specifically the Teshekpuk Caribou Herd) and subsistence resources. The workshop participants will include but will not be limited to federal, State, and North Slope Borough representatives. All of these modifications will increase protection for caribou and other wildlife that utilize the Teshekpuk Lake Caribou Habitat Area during all seasons.

- b. Within the Teshekpuk Lake Caribou Habitat Area, permittee shall orient linear corridors when laying out oil and gas field developments to address migration and corralling effects and to avoid loops of road and/or pipeline that connect facilities.
- c. Ramps over pipelines, buried pipelines, or pipelines buried under the road may be required by the authorized officer, after consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies, in the Teshekpuk Lake Caribou Habitat Area where pipelines potentially impede caribou movement.
- d. Major construction activities using heavy equipment (e.g., sand/gravel extraction and transport, pipeline and pad construction, but not drilling from existing production pads) shall be suspended within Teshekpuk Lake Caribou Habitat Area from May 20 through August 20, unless approved by the authorized officer in consultation with the appropriate federal, State, and North Slope Borough regulatory and resource agencies. The intent of this requirement is to restrict activities that will disturb caribou during calving and insect-relief

periods. If caribou arrive on the calving grounds prior to May 20, major construction activities will be suspended. The permittee shall submit with the development proposal a “stop work” plan that considers this and any other mitigation related to caribou early arrival. The intent of this latter requirement is to provide flexibility to adapt to changing climate conditions that may occur during the life of fields in the region.

- e. The following ground and air traffic restrictions shall apply in the areas and time periods indicated. Ground traffic restrictions apply to permanent oil and gas-related roads:
 1. Within the Teshekpuk Lake Caribou Habitat Area, from May 20 through August 20, traffic speed shall not exceed 15 miles per hour when caribou are within ½ mile of the road. Additional strategies may include limiting trips, using convoys, using different vehicle types, etc., to the extent practicable. The permittee shall submit with the development proposal a vehicle use plan that considers these and any other mitigation. The vehicle use plan shall also include a vehicle-use monitoring plan. Adjustments will be required by the authorized officer if resulting disturbance is determined to be unacceptable.
 2. The permittee or a contractor shall observe caribou movement from May 20 through August 20, or earlier if caribou are present prior to May 20. Based on these observations, traffic will be stopped:
 - a. temporarily to allow a crossing by 10 or more caribou. Sections of road will be evacuated whenever an attempted crossing by a large number of caribou appears to be imminent. The permittee shall submit with the development proposal a vehicle use plan that considers these and any other mitigation.
 - b. by direction of the authorized officer throughout a defined area for up to four weeks to prevent displacement of calving caribou. The vehicle use plan shall also include a vehicle-use monitoring plan. Adjustments will be required by the authorized officer if resulting disturbance is determined to be unacceptable.
 3. Major equipment, materials, and supplies to be used at oil and gas work sites in the Teshekpuk Lake Caribou Habitat Area shall be stockpiled prior to or after the period of May 20 through August 20 to minimize road traffic during that period.
 4. Within the Teshekpuk Lake Caribou Habitat Area aircraft use (including fixed wing and helicopter) shall be restricted from May

20 through August 20 unless doing so endangers human life or violates safe flying practices. Authorized users of the NPR-A may be restricted from using aircraft larger than a Twin Otter, and limited to an average of one fixed-wing aircraft takeoff and landing per day per airstrip, except for emergency purposes. Restrictions may include prohibiting the use of aircraft larger than a Twin Otter by authorized users of the NPR-A, including oil and gas permittee, from May 20 through August 20 within the Teshekpuk Lake Caribou Habitat Area, except for emergency purposes. The permittee shall submit with the development proposal an aircraft use plan that considers these and other mitigation. The aircraft use plan shall also include an aircraft monitoring plan. Adjustments, including perhaps suspension of all aircraft use, will be required by the authorized officer if resulting disturbance is determined to be unacceptable. This best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.

5. Aircraft shall maintain a minimum height of 1,000 feet above ground level (except for takeoffs and landings) over caribou winter ranges from December 1 through May 1, and 2,000 feet above ground level over the Teshekpuk Lake Caribou Habitat Area from May 20 through August 20, unless doing so endangers human life or violates safe flying practices. Caribou wintering ranges will be defined annually by the authorized officer in consultation with the Alaska Department of Fish and Game. This best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.

K-6 Lease Stipulation/Best Management Practice – Coastal Area

Note: This measure would be applied to relevant new leases. On lands unavailable for leasing in the respective alternatives, K-6 would be a best management practice.

Objective: Protect coastal waters and their value as fish and wildlife habitat (including, but not limited to, that for waterfowl, shorebirds, and marine

mammals), minimize hindrance or alteration of caribou movement within caribou coastal insect-relief areas; protect the summer and winter shoreline habitat for polar bears, and the summer shoreline habitat for walrus and seals; prevent loss of important bird habitat and alteration or disturbance of shoreline marshes; and prevent impacts to subsistence resources and activities.

Requirement/Standard:

- a. Exploratory well drill pads, production well drill pads, or a central processing facility for oil or gas would not be allowed in coastal waters or on islands between the northern boundary of the Reserve and the mainland, or in inland areas within one mile of the coast. (Note: This would include the entirety of the Kasegaluk Lagoon and Peard Bay Special Areas.) Other facilities necessary for oil and gas production within NPR-A that necessarily must be within this area (e.g., barge landing, seawater treatment plant, or spill response staging and storage areas) would not be precluded. Nor would this stipulation preclude infrastructure associated with offshore oil and gas exploration and production or construction, renovation, or replacement of facilities on existing gravel sites. Lessees/permittees shall consider the practicality of locating facilities that necessarily must be within this area at previously occupied sites such as various Husky/USGS drill sites and Distant Early Warning-Line sites. All lessees/permittees involved in activities in the immediate area must coordinate use of these new or existing sites with all other prospective users. Before conducting open water activities, the lessee shall consult with the Alaska Eskimo Whaling Commission, the North Slope Borough, and local whaling captains associations to minimize impacts to the fall and spring subsistence whaling activities of the communities of the North Slope. In a case in which the BLM authorizes a permanent oil and gas facility within the Coastal Area, the lessee/permittee shall develop and implement a monitoring plan to assess the effects of the facility and its use on coastal habitat and use.
- b. Marine vessels used as part of a BLM-authorized activity shall maintain a 1-mile buffer from the shore when transiting past an aggregation of seals (primarily spotted seals) using a terrestrial haulout unless doing so would endanger human life or violate safe boating practices. Marine vessels shall not conduct ballast transfers or discharge any matter into the marine environment within 3 miles of the coast except when necessary for the safe operation of the vessel.

- c. Marine vessels used as part of a BLM-authorized activity shall maintain a ½-mile buffer from shore when transiting past an aggregation of walrus using a terrestrial haulout.

K-7 Lease Stipulation/Best Management Practice - Colville River Special Area

Note: This measure would be applied to relevant new leases. On lands unavailable for leasing, K-7 would be a best management practice.

Objective: Prevent or minimize loss of raptor foraging habitat (also see Lease Stipulation K-1).

Requirement/Standard: If necessary to construct permanent facilities within the Colville River Special Area, all reasonable and practicable efforts shall be made to locate permanent facilities as far from raptor nests as feasible. Additionally, within 15 miles of raptor nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by-case basis, and in consultation with appropriate federal and State regulatory and resource agencies, essential pipeline and road crossings will be permitted through the Colville River Special Area where no other feasible or prudent options are available.

K-8 Best Management Practice - Pik Dunes

Note: None of the area is available for oil and gas leasing or exploratory drilling. Therefore, K-8 will apply as a best management practice.

Objective: Retain unique qualities of the Pik Dunes, including geologic and scenic uniqueness, insect-relief habitat for caribou, and habitat for several uncommon plant species.

Requirement/Standard: Surface structures, except approximately perpendicular pipeline crossings and ice pads, are prohibited within the Pik Dunes.

K-9 Best Management Practice – Teshekpuk Lake Caribou Movement Corridor

Note: None of the area is available for oil and gas leasing or exploratory drilling. Therefore, K-9 will apply as a best management practice. All of the former movement corridor northwest of Teshekpuk Lake and all but the eastern-most part of the other corridor that lies north of the Kogru River are within an area prohibiting new non-subsistence infrastructure. Therefore,

this best management practice only applies to the lands in the former corridor north of the Kogru River in Ts. 14-15 N., R. 2 W., U.M.

Objective: Minimize disturbance and hindrance of caribou, or alteration of caribou movements (that are essential for all season use, including calving and rearing, insect-relief, and migration) in the area extending from the eastern shore of Teshekpuk Lake eastward to the Kogru River.

Requirement/Standard: Within the Teshekpuk Lake Caribou Movement Corridor, no permanent oil and gas facilities, except for pipelines or other infrastructure associated with offshore oil and gas exploration and production, will be allowed. Prior to the permitting of permanent oil and gas infrastructure in the Caribou Movement Corridor, a workshop will be convened to identify the best corridor for pipeline construction in efforts to minimize impacts to wildlife and subsistence resources. The workshop participants will include but will not be limited to federal, State, and North Slope Borough representatives.

K-10 Best Management Practice – Southern Caribou Calving Area

Note: None of the area is available for oil and gas leasing or exploratory drilling. Therefore, K-10 will apply as a best management practice. All but the eastern-most part of the former Southern Caribou Calving Area lies within an area prohibiting new non-subsistence infrastructure. Therefore, this best management practice only applies to the lands in the former area T. 14 N., Rs. 1-2 W., U.M.; T. 14 N., R. 1 E., U.M; and T. 15 N., R. 2 W., U.M.

Objective: Minimize disturbance and hindrance of caribou, or alteration of caribou movements (that are essential for all season use, including calving and post calving, and insect-relief) in the area south/southeast of Teshekpuk Lake.

Requirement/Standard: Within the Southern Caribou Calving Area, no permanent oil and gas facilities, except pipelines or other infrastructure associated with offshore oil and gas exploration and production, will be allowed. Prior to the permitting of permanent oil and gas infrastructure in the Southern Caribou Calving Area, a workshop will be convened to identify the best corridor for pipeline construction in efforts to minimize impacts to wildlife and subsistence resources. The workshop participants will include but will not be limited to federal, State, and North Slope Borough representatives.

K-11 Lease Stipulation/Best Management Practice – Western Arctic Herd Habitat Area

Note: This measure would be applied to relevant new leases. On lands unavailable for leasing, K-11 would be a best management practice. Portions of K-11 that apply to permanent infrastructure are only relevant to the northern portion of the Utukok River Uplands Special Area available to application for such infrastructure.

Objective: Minimize disturbance and hindrance of caribou, or alteration of caribou movements through the Utukok River Uplands Special Area that are essential for all season use, including calving and rearing, insect-relief, and migration.

Requirement/Standard: In the Utukok River Uplands Special Area the following standards will be applied to permitted activities:

- a. Before authorization of construction of permanent facilities, the lessee shall design and implement and report a study of caribou movement unless an acceptable study(s) specific to the Western Arctic Herd has been completed within the last 10 years. The study shall include a minimum of four years of current data on the Western Arctic Herd's movements and the study design shall be approved by the authorized officer in consultation with the appropriate federal, State, and North Slope Borough wildlife and resource agencies and the Western Arctic Caribou Herd Working Group. The study should provide information necessary to determine facility (including pipeline) design and location. Lessees may submit individual study proposals or they may combine with other lessees in the area to do a single, joint study for the entire Utukok River Uplands Special Area. Study data may be gathered concurrently with other activities as approved by the authorized officer and in consultation with the appropriate federal, State, and North Slope Borough wildlife and resource agencies. A final report of the study results will be prepared and submitted. Prior to the permitting of a pipeline in the Utukok River Uplands Special Area, a workshop will be convened to identify the best corridor for pipeline construction in efforts to minimize impacts to wildlife (specifically the Western Arctic Herd) and subsistence resources. The workshop participants will include but will not be limited to federal, State, and North Slope Borough representatives. All of these modifications will increase protection for caribou and other wildlife that utilize the Utukok River Uplands Special Area during all seasons.
- b. Within the Utukok River Uplands Special Area, lessees shall orient linear corridors when laying out oil and gas field developments to

address migration and corralling effects and to avoid loops of road and/or pipeline that connect facilities.

- c. Ramps over pipelines, buried pipelines, or pipelines buried under the road may be required by the authorized officer, after consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies, in the Utukok River Uplands Special Area where pipelines potentially impede caribou movement.
- d. Major construction activities using heavy equipment (e.g., sand/gravel extraction and transport, pipeline and pad construction, but not drilling from existing production pads) shall be suspended within Utukok River Uplands Special Area from May 20 through August 20, unless approved by the authorized officer in consultation with the appropriate federal, State, and North Slope Borough regulatory and resource agencies. The intent of this requirement is to restrict activities that will disturb caribou during calving and insect-relief periods. If caribou arrive on the calving grounds prior to May 20, major construction activities will be suspended. The lessee shall submit with the development proposal a “stop work” plan that considers this and any other mitigation related to caribou early arrival. The intent of this latter requirement is to provide flexibility to adapt to changing climate conditions that may occur during the life of fields in the region.
- e. The following ground and air traffic restrictions shall apply to permanent oil and gas-related roads in the areas and time periods indicated:
 - 1. Within the Utukok River Uplands Special Area, from May 20 through August 20, traffic speed shall not exceed 15 miles per hour when caribou are within ½ mile of the road. Additional strategies may include limiting trips, using convoys, using different vehicle types, etc., to the extent practicable. The lessee shall submit with the development proposal a vehicle use plan that considers these and any other mitigation. The vehicle use plan shall also include a vehicle-use monitoring plan. Adjustments will be required by the authorized officer if resulting disturbance is determined to be unacceptable.
 - 2. The lessee or a contractor shall observe caribou movement from May 20 through August 20, or earlier if caribou are present prior to May 20. Based on these observations, traffic will be stopped:
 - a. Temporarily to allow a crossing by 10 or more caribou.
 Sections of road will be evacuated whenever an attempted

crossing by a large number of caribou appears to be imminent.

The lessee shall submit with the development proposal a vehicle use plan that considers these and any other mitigation.

- b. By direction of the authorized officer throughout a defined area for up to four weeks to prevent displacement of calving caribou. The vehicle use plan shall also include a vehicle-use monitoring plan. Adjustments will be required by the authorized officer if resulting disturbance is determined to be unacceptable.
3. Major equipment, materials, and supplies to be used at oil and gas work sites in the Utukok River Uplands Special Area shall be stockpiled prior to or after the period of May 20 through August 20 to minimize road traffic during that period.
4. Within the Utukok River Uplands Special Area aircraft use (including fixed wing and helicopter) shall be restricted from May 20 through August 20 unless doing so endangers human life or violates safe flying practices. Authorized users of the NPR-A may be restricted from using aircraft larger than a Twin Otter, and limited to an average of one fixed-wing aircraft takeoff and landing per day per airstrip, except for emergency purposes. Restrictions may include prohibiting the use of aircraft larger than a Twin Otter by authorized users of the NPR-A, including oil and gas lessees, from May 20 through August 20 within the Utukok River Uplands Special Area, except for emergency purposes. The lessee shall submit with the development proposal an aircraft use plan that considers these and other mitigation. The aircraft use plan shall also include an aircraft monitoring plan. Adjustments, including perhaps suspension of all aircraft use, will be required by the authorized officer if resulting disturbance is determined to be unacceptable. This lease stipulation is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.
5. Aircraft shall maintain a minimum height of 1,000 feet above ground level (except for takeoffs and landings) over caribou winter ranges from December 1 through May 1, and 2,000 feet above ground level over the Utukok River Uplands Special Area from May 20 through August 20, unless doing so endangers human life or violates safe flying practices. Caribou wintering ranges will be

defined annually by the authorized officer in consultation with the Alaska Department of Fish and Game. This lease stipulation is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objective of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.

Summer Vehicle Tundra Access

L-1 Best Management Practice

Objective: Protect stream banks and water quality; minimize compaction and displacement of soils; minimize the breakage, abrasion, compaction, or displacement of vegetation; protect cultural and paleontological resources; maintain populations of, and adequate habitat for birds, fish, and caribou and other terrestrial mammals; and minimize impacts to subsistence activities.

Requirement/Standard: On a case-by-case basis, BLM may permit low-ground-pressure vehicles to travel off of gravel pads and roads during times other than those identified in Best Management Practice C-2a. Permission for such use would only be granted after an applicant has:

- a. Submitted studies satisfactory to the authorized officer of the impacts on soils and vegetation of the specific low-ground-pressure vehicles to be used. These studies should reflect use of such vehicles under conditions similar to those of the route proposed for use and should demonstrate that the proposed use would have no more than minimal impacts to soils and vegetation.
- b. Submitted surveys satisfactory to the authorized officer of subsistence uses of the area as well as of the soils, vegetation, hydrology, wildlife and fish (and their habitats), paleontological and archaeological resources, and other resources as required by the authorized officer.
- c. Designed and/or modified the use proposal to minimize impacts to the authorized officer's satisfaction. Design steps to achieve the objectives and based upon the studies and surveys may include, but not be limited to, timing restrictions (generally it is considered inadvisable to conduct tundra travel prior to August 1 to protect ground-nesting birds), shifting of work to winter, rerouting, and not proceeding when certain wildlife are present or subsistence activities are occurring. At the discretion of the authorized officer, the plan for summer tundra vehicle access may be included as part of the spill

prevention and response contingency plan required by 40 CFR 112 (Oil Pollution Act) and Best Management Practice A-4.

General Wildlife and Habitat Protection

M-1 Best Management Practice

Objective: Minimize disturbance and hindrance of wildlife, or alteration of wildlife movements through the NPR-A.

Requirement/Standard: Chasing wildlife with ground vehicles is prohibited. Particular attention will be given to avoid disturbing caribou.

M-2 Best Management Practice

Objective: Prevent the introduction, or spread, of non-native, invasive plant species in the NPR-A.

Requirement/Standard: Certify that all equipment and vehicles (intended for use either off or on roads) are weed-free prior to transporting them into the NPR-A. Monitor annually along roads for non-native invasive species, and initiate effective weed control measures upon evidence of their introduction. Prior to operations in the NPR-A, submit a plan for the BLM's approval, detailing the methods for cleaning equipment and vehicles, monitoring for weeds and weed control.

M-3 Best Management Practice

Objective: Minimize loss of populations of, and habitat for, plant species designated as Sensitive by the BLM in Alaska.

Requirement/Standard: If a development is proposed in an area that provides potential habitat for a BLM Sensitive Plant Species, the development proponent would conduct surveys at appropriate times of the summer season and in appropriate habitats for the Sensitive Plant Species that might occur there. The results of these surveys will be submitted to the BLM with the application for development.

M-4 Best Management Practice

Objective: Minimize loss of individuals of, and habitat for, mammalian species designated as Sensitive by the BLM in Alaska.

Requirement/Standard: If a development is proposed in an area that provides potential habitat for the Alaska tiny shrew, the development proponent would conduct surveys at appropriate times of the year and in appropriate

habitats in an effort to detect the presence of the shrew. The results of these surveys will be submitted to BLM with the application for development.

EXHIBIT D

The Colville Special Area Management Plan Decision Record and Memorandum with Applicable Protections



United States Department of the Interior




BUREAU OF LAND MANAGEMENT
Arctic Office
222 University Avenue
Fairbanks, Alaska 99709-3816
<http://www.blm.gov/ak>

OCT 05 2016

In Reply Refer To:
3130 (LLAKF010)

Memorandum

To: Associate State Director, Alaska State Office

From: Stacie McIntosh 
Manager, Arctic Office

Subject: Applicability of Colville River Special Area Management Plan Memo dated September 17, 2013 to Annual Lease Sales in the NPR-A

In September 2013 a Memo was prepared pursuant to the issuance of the of the 2013 National Petroleum Reserve in Alaska (NPR-A) Integrated Activity Plan Record of Decision (ROD). The Memo specified the protections from the Colville River Special Area Management Plan (CRSAMP) that remained applicable to leases in the NPR-A and should therefore be included in the Detailed Statement of Sale, as well as those protections that were superseded by the issuance of the ROD.

While the Memo was specifically prepared for the 2013 NPR-A Detailed Statement of Sale, it remains applicable to all annual lease sales. CRSAMP protections 4, 5, and 6 described within the Memo should be included as lease terms and stipulations in every Detailed Statement of Sale prepared for lease sales within the NPR-A.

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

**Arctic Field Office
1150 University Avenue
Fairbanks, AK 99709
Phone: 907-474-2200
FAX: 907-474-2282**

DECISION RECORD

**Colville River Special Area Management Plan
Environmental Assessment
Environmental Assessment AK-023-08-01**

INTRODUCTION

The Bureau of Land Management (BLM) has conducted an environmental analysis (EA Number AK-023-08-01) to evaluate the effects of implementation of the Colville River Special Area Management Plan (CRSAMP), which is located within the National Petroleum Reserve — Alaska (NPR-A).

The CRSAMP builds upon the protections for the arctic peregrine falcon provided in the Records of Decision (RODs) for the Northeast NPR-A Supplemental Integrated Activity Plan (IAP)/EIS (2008) and the Northwest NPR-A EIS (2004). It also includes additional management actions to protect arctic peregrine falcons that were developed from the NPR-A Raptor Workshop and were not covered in the two NPR-A IAP/EISs. New protections are associated with requirements for permittees and other authorized users. The CRSAMP applies protections for the arctic peregrine falcon for the CRSA lands within the South NPR-A, which does not have a current integrated activity plan that defines specific protections as contained in the CRSAMP.

The EA considered two alternatives: the No Action Alternative and the Proposed Action, which is the alternative recommended by the cooperating parties.

PLAN CONFORMANCE AND COMPLIANCE

The action is in conformance with multiple management objectives of the RODs of the Northeast NPR-A Supplemental EIS/IAP and Northwest NPR-A IAP/EIS. The Proposed Action complies with all laws, regulations, and policies.

DECISION TO IMPLEMENT THE PROPOSED ACTION ALTERNATIVE

It is my decision to authorize implementation of the CRSAMP Proposed Action as outlined in the Colville River Special Area Management Plan Environmental Assessment (EA AK-023-08-01). The Proposed Action is found in Section 2.1. The Proposed Action is a compilation of protection measures designed to protect the arctic peregrine falcon in the CRSA. The CRSAMP includes implementation of nine protective measures that would apply consistently throughout the South, Northwest and Northwest planning units in the CRSA. Specifically these Protections include: 1) 1 mile setback prohibiting construction of permanent facilities, 2) considerations for 15 mile foraging area, 3) aircraft flight restrictions, 4) minimize campsite disturbance, 5) minimize authorized cliff site visits, 6) minimize construction and clean up impacts near nest sites, 7) minimize impacts from motorized ground-vehicles, 8) minimize impacts from power lines, and 9) minimize effects from sand/gravel extraction.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based upon a review of the EA and the supporting documents, the Proposed Action will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. Therefore, an environmental impact statement is not required. See FONSI for more information.

PUBLIC INVOLVEMENT

Public involvement during the development of this management plan and EA included discussions and coordination with the U.S. Fish and Wildlife Service, Alaska Department of Fish and Game (ADF&G), Alaska Department of Natural Resources (ADNR), the Arctic Slope Regional Corporation (ASRC), the North Slope Borough (NSB), federally-recognized tribes, several non-governmental organizations, industry, the Alaska Resource Advisory Council, as well as interested individuals. Announcements were made available on the Arctic Field Office Planning web page beginning in January 2008. Preliminary versions of the CRSAMP and EA were provided to these organizations and available to the public on June 2, 2008, and comments were received through June 27, 2008. In addition the availability of the documents was included in the "Spotlight" section of Alaska BLM webpage. Comments on the preliminary documents were received from the Peregrine Fund, North Slope Borough, Center for Biological Diversity, Alaska Audubon (also representing The Wilderness Society, Northern Alaska Environmental Center, and Natural Resources Defense Council), the State of Alaska DNR, and the U.S. Fish and Wildlife Service.

Comments and responses are included in Appendix E of the EA. Any changes to the CRSAMP and EA as a result of the comments are described in Appendix E. BLM reviewed a total of 95 itemized comments from the six letters received. We responded to 95 comment, and 38 of these responses led to changes to the CRSAMP or EA.

RATIONALE FOR THE DECISION

The Proposed Action meets the Purpose and Need of the EA (see Section 1.2); the No

Action Alternative was not selected because it would not meet the purpose and need. The No Action alternative does not provide for consistent protections for arctic peregrine falcons within CRSA, oil and gas leasing would not be allowed in the Northwest NPR-A; and the mandate to prepare a management plan for the CRSA, as stated in the Northeast Supplemental NPR-A ROD (2008), would not be fulfilled.

The Proposed Action is consistent with the JAP/EIS Records of Decision for the Northeast and Northwest NPR-A. The public has been involved with the planning process, and many substantial comments have been considered. No significant adverse impacts to resources and values have been identified.

APPEAL PROVISIONS

This decision shall take effect immediately upon the date it is signed by the authorized officer, July 18, 2008, and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay (43 CFR 2801.10(b)). Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a notice of appeal must be filed in the office of the authorized officer at: Arctic Field Office, 1150 University Avenue, Fairbanks AK 99709. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the authorized officer. If you wish to file a petition for stay pursuant to 43 CFR Part 4.2 1(b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards: (1) The relative harm to the parties if the stay is granted or denied, (2) The likelihood of the appellant's success on the merits, (3) The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and (4) Whether the public interest favors granting the stay. If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the authorized officer. A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Office of the Solicitor, U.S. Department of the Interior, 4230 University Drive Suite 300, Anchorage, AK 99508, not later than 15 days after filing the document with the authorized officer and/or IBLA.

Approved:


Arctic Field Office Manager

7/18/2008
Date

Table 2-1. Proposed Action and No Action Alternative

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
<p>Protection 1 <u>Objective:</u> Minimize the loss of arctic peregrine falcon nesting habitat in the CRSA</p> <p><u>Requirement/Standard:</u> To minimize the direct loss of arctic peregrine falcon nesting habitat and to protect nest sites in the CRSA the following protective measures apply: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the stream bed and adjacent to the rivers listed below at the distances identified. On a case-by-case basis, and in consultation with Federal, State, and North Slope Borough regulatory and resource agencies (as appropriate - based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings perpendicular to the main channel will be permitted through setback areas.</p> <p>a. Colville River: downstream of the Etivluk River a continuous 1-mile setback measured from the highest high water mark on the left bank (facing downstream); upstream of the Etivluk River a 1-mile setback measured from the ordinary high water mark of the bank on both sides of the river. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes.</p> <p>b. Kikiarorak River: downstream from T. 2 N., R. 4 W., U.M., a continuous 1-mile setback as measured from the top of the bluff</p>	<p>K-1 Lease Stipulation - Rivers <u>Objective:</u> Minimize the...the loss of raptor habitat...</p> <p><u>Requirement/Standard:</u> Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the streambed and adjacent to the rivers listed below at the distances identified...Along the Colville River and a portion of the Ikpihpuk a 1-mile (from the bank's highest high water mark) setback is required to protect important raptor habitat (for locations along rivers where setback distances change). On a case-by case basis, and in consultation with Federal, state, and NSB regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings to the main channel will be permitted through setback areas...</p> <p>a. Colville River: a 1-mile setback from the boundary of NPR-A along the Colville River as determined by cadastral survey to be the highest high watermark on the left (western or northern) bank extending the length of that portion of the river located within the Planning Area. Note: The Planning Area excludes conveyed Native lands along the lower reaches of the Colville River. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. Note: This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes. This preserves the opportunity to</p>	<p>K-1 Lease Stipulation-Rivers <u>Objective:</u> Minimize...the loss of raptor habitat...</p> <p><u>Requirement/ Standard:</u> Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the stream bed and adjacent to the rivers listed below at the distances identified....Along the Colville River and a portion of the Ikpihpuk a 1-mile setback is required to protect important raptor habitat. (For locations along rivers where setback distances change, see Map 20 in the Final Northwest National Petroleum Reserve- Alaska Integrated Activity Plan/Environmental Impact Statement). On a case-by case basis, and in consultation with Federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings perpendicular to the main channel will be permitted (unless noted otherwise) through setback areas. ...</p> <p>a) Colville River: a 1-mile setback from the northern bluff (or bank if there is no bluff) of the Colville River extending the length of that portion of the river within the Planning Area. Road crossings intended to solely support oil and gas activities are prohibited. Note: This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes. This preserves the opportunity to plan, design, and construct public</p>

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
<p>(or bank if there is no bluff) of both sides of the river.</p> <p>c. Kogosukruk River: downstream from T. 2 N., R. 3 W., U.M., a continuous 1-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river and several of its tributaries.</p>	<p>plan, design, and construct public transportation systems to meet the economic, transportation, and public health and safety needs of the State of Alaska and/or communities within National Petroleum Reserve - Alaska.</p> <p>d. 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 (including the four tributaries off the southern bank) downstream from T. 2 N., R. 3 W., U.M.. No permanent oil and gas surface facilities, except essential transportation crossings, would be allowed within 1 mile of the top of the bluff (or bank if there is no bluff) on either side of the rivers and several of the Kogosukruk tributaries.</p>	<p>transportation systems to meet the economic, transportation, and public health and safety needs of the State of Alaska and/or communities within NPR-A.</p>

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
<p>Protection 2 <u>Objective:</u> Prevent or minimize loss of arctic peregrine falcon foraging habitat in the CRSA</p> <p><u>Requirement/Standard:</u> To minimize the direct loss of arctic peregrine falcon foraging habitat in the CRSA the following measures apply: If necessary to construct permanent facilities within the CRSA, all reasonable and practicable efforts shall be made to locate permanent facilities as far from arctic peregrine falcon nests as feasible. Within 15 miles of arctic peregrine falcon nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal or it is determined that there is no feasible or prudent alternative. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by case basis, and in consultation with appropriate federal and state regulatory and resource agencies, essential pipeline and road crossings will be permitted through these areas where no other feasible or prudent options are available.</p>	<p>K-7 Lease Stipulation–Colville River Special Area <u>Objective:</u> Prevent or minimize loss of raptor foraging habitat. (also see Lease Stipulation K-1; Rivers Area)</p> <p><u>Requirement/Standard for Facilities:</u> If necessary to construct permanent facilities within the Colville River Special Area, all reasonable and practicable efforts shall be made to locate permanent facilities as far from raptor nests as feasible. Within 15 miles of raptor nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal or it is determined that there is no feasible or prudent alternative. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by case basis, and in consultation with appropriate Federal and state regulatory and resource agencies, essential pipeline and road crossings will be permitted through these areas where no other feasible or prudent options are available.</p>	<p>K-7 Required Operating Procedure–Colville River Special Area <u>Objective:</u> Prevent or minimize loss of raptor foraging habitat.</p> <p><u>Requirement/Standard:</u> If necessary to construct permanent facilities within the Colville River Special Area, all reasonable and practicable efforts shall be made to locate permanent facilities as far from raptor nests as feasible. Within 15 mile of raptor nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal or it is determined that there is no feasible or prudent alternative. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by case basis, and in consultation with appropriate Federal and State regulatory and resource agencies, essential pipeline and road crossings will be permitted through these areas where no other options are available.</p>
<p>Protection 3 <u>Objective:</u> Minimize the effects of low-flying aircraft on arctic peregrine falcons in the CRSA</p> <p><u>Requirement/Standard:</u> To minimize disturbance to nesting arctic peregrine falcons, aircraft authorized by BLM are required to maintain an altitude of at least 1,500 feet above ground level (AGL) when within ½ mile of cliffs identified as arctic peregrine falcon nesting sites from April 15 through August 15. This protection is not intended to restrict flights necessary to conduct wildlife surveys to obtain information necessary to satisfy wildlife data</p>	<p>F-1 Required Operating Procedure <u>Objective:</u> Minimize the effects of low-flying aircraft on wildlife, traditional subsistence activities, and local communities.</p> <p><u>Requirement/Standard:</u> The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines (Note: This ROP is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objectives of the stipulations and ROPs. However, flights necessary to gain this information</p>	<p>F-1 Required Operating Procedure <u>Objective:</u> Minimize the effects of low-flying aircraft on wildlife....</p> <p><u>Requirement/Standard:</u> The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines: a) Aircraft shall maintain an altitude of at least 1,500 ft above ground level (AGL) when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and within ½ mile of known gyrfalcon nest sites from March 15 to August 15,</p>

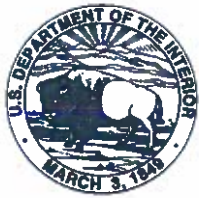
Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
collection requirements. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.	will be restricted to the minimum necessary to collect such data.): a. Aircraft shall maintain an altitude of at least 1,500 feet above ground level (AGL) when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and within ½ mile of known gyrfalcon nest sites from March 15 to August 15, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from the BLM necessary to plan flight routes when routes may go near falcon nests...	unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from BLM necessary to plan flight routes when routes may go near falcon nests.
Protection 4 This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000). <u>Objective:</u> Minimize disturbance impacts on nesting arctic peregrine falcons in the CRSA by reducing effects of campsite activity. <u>Requirement/Standard:</u> To reduce disturbance from campsite activity to nesting arctic peregrine falcons campsites authorized by BLM, including short and long-term camps and agency work camps, shall be located at least 500 meters from any known arctic peregrine falcon nest site. Exceptions may be granted by the authorized officer on a case-by-case basis.	None	None
Protection 5 This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000) <u>Objective:</u> Minimize disturbance impacts to nesting arctic peregrine falcons from authorized activities at cliff sites.	None	None

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
<p><u>Requirement/Standard:</u> All users authorized by BLM, including BLM and other agency personnel, shall submit for approval an operational plan that includes dates, locations, and schedule of visits to cliff sites, when dates are between April 15 and August 15.</p> <p>The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any cliff per nesting season (April 15 through August 15) by all authorized users shall be limited to three. Exceptions may be granted if the detailed operations plan documents why the necessary work could be done no other way.</p> <p>Raptor biologists must coordinate their activities with the BLM, U.S. Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADF&G) and the North Slope Borough (NSB); follow the guidelines for conduct activities near arctic peregrine falcon nests; and follow Protection 4 regarding campsite placement. Exceptions to this requirement may be granted when necessary to conduct certain studies.</p>		
<p>Protection 6 This protection has been adapted from the memorandum, Implementation of Recommendations from NPR-A Raptor Workshop (BLM 2000)</p> <p><u>Objective:</u> Minimize disturbance impacts to arctic peregrine falcons in the CRSA from construction and non-emergency clean up.</p> <p><u>Requirement/Standard:</u> To reduce disturbance impacts to arctic peregrine falcons in the CRSA, off-road foot traffic construction or non-emergency hazardous materials or solid waste clean-up efforts within 1</p>	None	None

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
mile of known arctic peregrine falcon nests shall be prohibited during the period April 15 through August 15. Construction refers to building permanent facilities, not those used in winter only. Non-emergency clean-up refers to remediation of old sites, such as removal of drums, buildings with asbestos, or soil that has been contaminated longer than one season. Off-road foot-traffic refers to human activity (walking) associated with construction or clean-up, occurring off the gravel road or pad, or off the immediate site clean-up.		
<p>Protection 7 This protection has been adapted from C-2 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p><u>Objective:</u> Minimize disturbance impacts to nesting arctic peregrine falcons in the CRSA from motorized ground-vehicle use.</p> <p><u>Requirement/Standard</u> Motorized ground-vehicle use within the CRSA authorized by BLM shall be minimized within one mile of any known arctic peregrine falcon nest from April 15 through August 15. Such use shall be prohibited within ½ mile of nests during the same period unless an exception is granted by BLM.</p>	<p>C-2 Required Operating Procedure <u>Objective:</u> Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.</p> <p><u>Requirement/Standard:</u> f. Motorized ground-vehicle use within the CRSA associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within the Colville River Raptor, Passerine, and Moose Area 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.</p>	None
<p>Protection 8 This protection has been adapted from E-16 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p><u>Objective:</u> Minimize impacts to arctic peregrine falcon in the CRSA from power lines.</p> <p><u>Requirement/Standard:</u> To minimize impacts to arctic peregrine falcons in the CRSA from the power lines,</p>	<p>E-16 Required Operating Procedure <u>Objective:</u> Prevent or minimize the loss of raptors due to electrocution by power lines.</p> <p><u>Requirement/Standard:</u> Comply with the most up to date suggested practices for raptor protection on power lines.</p>	None

Proposed Action ¹	No Action Alternative	
	Northeast NPR-A 2008 ROD	Northwest NPR-A 2004 ROD
construction projects will comply with the most up to date suggested practices for arctic peregrine falcon protection on power lines. All power lines and poles shall be designed and constructed in a manner which reflects safe configurations to prevent death of arctic peregrine falcons by electrocution (BLM 2008b).		
<p>Protection 9 This protection has been adapted from E-15 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p><u>Objective:</u> Minimize impacts from sand and/or gravel extraction to arctic peregrine falcons in the CRSA.</p> <p><u>Requirement/Standard:</u> To reduce impacts to arctic peregrine falcons in the CRSA from sand or gravel extraction the following measures apply:</p> <ol style="list-style-type: none"> Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs (BLM 2008b). 	<p>E-15 Required Operating Procedure <u>Objective:</u> Prevent or minimize the loss of nesting habitat for cliff nesting raptors.</p> <p><u>Requirement/Standard:</u> a. Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited. b. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs.</p>	None

¹ Note: This table does not provide a comprehensive list of all stipulations and required operating procedures that may be adopted. It includes stipulations and ROPs from those RODs designed to protect arctic peregrine falcons or the habitat important to those birds within the CRSA. Also, while the protections listed under the Proposed Action apply to all areas of the CRSA, including the South NPR-A, those for the No Action Alternative apply only to the NE or NW NPR-A.



BUREAU OF LAND MANAGEMENT
Arctic Field Office
1150 University Avenue
Fairbanks, Alaska 99709-3844
<http://www.blm.gov/ak>



SEP 17 2013

In Reply Refer To:
3130 (LLAKF01000)

Memorandum

To: Associate State Director, Alaska State Office

Through: Steve Hartmann *Steve Hartmann*
District Manager, Fairbanks District Office

From: Lon Kelly *Lon Kelly*, acting
Manager, Arctic Field Office

Subject: Applicable Protections from the Colville River Special Area Management Plan for Inclusion in the 2013 NPR-A Detailed Statement of Sale

From 2008 through 2012 the Decision Record and Protections 1 through 9 from the Colville River Special Area Management Plan (CRSAMP) were included in the lease terms and stipulations in the Detailed Statement of Sale prepared for lease sales in the National Petroleum Reserve in Alaska (NPR-A). With the completion of the 2013 NPR-A IAP/EIS Record of Decision (ROD), several new Best Management Practices (BMPs) are now applicable to the Colville River Special Area and supersede several of the protections from the CRSAMP. A comparison table noting the language of the CRSAMP protections and the 2013 BMPs is attached. The following protections from the ROD are duplicative of CRSAMP protections and should not be included in the Detailed Statement of Sale:

- Protection 1 is covered by Best Management Practice K-1
- Protection 2 is covered by Best Management Practice K-7
- Protection 3 is covered by Best Management Practice E-1
- Protection 7 is covered by Best Management Practice C-2(f)
- Protection 8 is covered by Best Management Practice E-16
- Protection 9 is covered by Best Management Practice E-15

Protections 4, 5 and 6 from the CRSAMP do not have a corresponding protection in the 2013 ROD, and will need to be included as lease terms and stipulations in the Detailed Statement of Sale. These three protections are attached as Exhibit D.

Attachments:

Protections for Colville River Special Area 2013 Lease Sale: Exhibit D
Comparison of CRSAMP Protections and 2013 ROD BMPs

Exhibit D**Protections for Raptors and the Arctic Peregrine Falcon in the Colville River Special Area**
(From: Colville River Special Area Management Plan 2008)**Protection 4**

Objective: Minimize disturbance impacts on nesting arctic peregrine falcons in the CRSA by reducing effects of campsite activity.

Requirement/Standard: To reduce disturbance from campsite activity to nesting arctic peregrine falcons campsites authorized by BLM, including short and long-term camps and agency work camps, shall be located at least 500 meters from any known arctic peregrine falcon nest site. Exceptions may be granted by the authorized officer on a case-by-case basis.

Protection 5

Objective: Minimize disturbance impacts to nesting arctic peregrine falcons from authorized activities at cliff sites.

Requirement/Standard: All users authorized by BLM, including BLM and other agency personnel, shall submit for approval an operational plan that includes dates, locations, and schedule of visits to cliff sites, when dates are between April 15 and August 15. The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any cliff per nesting season (April 15 through August 15) by all authorized users shall be limited to three. Exceptions may be granted if the detailed operations plan documents why the necessary work could be done no other way. Raptor biologists must coordinate their activities with the BLM, U.S. Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADF&G) and the North Slope Borough (NSB); follow the guidelines for conduct activities near arctic peregrine falcon nests; and follow Protection 4 regarding campsite placement. Exceptions to this requirement may be granted when necessary to conduct certain studies.

Protection 6

Objective: Minimize disturbance impacts to arctic peregrine falcons in the CRSA from construction and non-emergency clean up.

Requirement/Standard: To reduce disturbance impacts to arctic peregrine falcons in the CRSA, off-road foot traffic construction or non-emergency hazardous materials or solid waste clean-up efforts within 1 mile of known arctic peregrine falcon nests shall be prohibited during the period April 15 through August 15. Construction refers to building permanent facilities, not those used in winter only. Non-emergency clean-up refers to remediation of old sites, such as removal of drums, buildings with asbestos, or soil that has been contaminated longer than one season. Off-road foot-traffic refers to human activity (walking) associated with construction or clean-up, occurring off the gravel road or pad, or off the immediate site clean-up.

Comparison of Protections between the Colville River Special Area Management Plan (2008) and the NPR-A IAP/EIS and Record of Decision (2013). Note: Text highlighted in yellow indicates the new protections that supersede the protections from the CRSAMP.

Colville River Special Area Management Plan	National Petroleum Reserve-Alaska IAP/EIS ROD
<p>Protection 1 Objective: Minimize the loss of arctic peregrine falcon nesting habitat in the CRSA</p> <p>Requirement/Standard: To minimize the direct loss of arctic peregrine falcon nesting habitat and to protect nest sites in the CRSA the following protective measures apply: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the stream bed and adjacent to the rivers listed below at the distances identified. On a case-by-case basis, and in consultation with Federal, State, and North Slope Borough regulatory and resource agencies (as appropriate - based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings perpendicular to the main channel will be permitted through setback areas.</p> <p>a. Colville River: downstream of the Etivluk River a continuous 1-mile setback measured from the highest high water mark on the left bank (facing downstream); upstream of the Etivluk River a 1-mile setback measured from the ordinary high water mark of the bank on both sides of the river. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes.</p> <p>b. Kikiarorak River: downstream from T. 2 N., R. 4 W., U.M., a continuous 1-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river.</p> <p>c. Kogosukruk River: downstream from T. 2 N., R. 3 W., U.M., a continuous 1-mile setback as measured from the top of the bluff (or bank if there is no bluff) of both sides of the river and several of its tributaries.</p>	<p>K-1 Lease Stipulation/Best Management Practice – Rivers Note: This measure would be applied to relevant new leases. On lands unavailable for leasing in the respective alternatives, K-1 would be a best management practice. The decision indicated below in subparagraphs (a) and (d) modify Protection 1 of the Colville River Special Area Management Plan by widening its applicability to 2 miles.</p> <p>Objective: Minimize the disruption of natural flow patterns and changes to water quality; the disruption of natural functions resulting from the loss or change to vegetative and physical characteristics of floodplain and riparian areas; the loss of spawning, rearing or over-wintering habitat for fish; the loss of cultural and paleontological resources; the loss of raptor habitat; impacts to subsistence cabin and campsites; the disruption of subsistence activities; and impacts to scenic and other resource values.</p> <p>Requirement/Standard: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the streambed and adjacent to the rivers listed below at the distances identified. (Gravel mines may be located within the active floodplain consistent with Best Management Practice E-8). On a case-by case basis, and in consultation with federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings to the main channel will be permitted through setback areas. The below setbacks may not be practical within river deltas; in such deltas, permanent facilities shall be designed to withstand a 200-year flood event. In the below list, if no upper limit for the setback is indicated, the setback extends to the head of the stream as identified in the National Hydrography Dataset.</p> <p>a. Colville River: a 2-mile setback from the boundary of NPR-A where the river determines the boundary along the Colville River as determined by cadastral survey to be the highest high watermark</p>

Colville River Special Area Management Plan	National Petroleum Reserve-Alaska IAP/EIS ROD
	<p>on the left (western or northern) bank and from both banks' ordinary high watermark where BLM-manages both sides of the river up through T5S, R30W, U.M. Above that point to its source at the juncture of Thunder and Storm creeks the setback will be ½ mile. Note: The planning area excludes conveyed Native lands along the lower reaches of the Colville River. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. Note: This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes, though the BLM would encourage minimal use of the setback area. This preserves the opportunity to plan, design, and construct public transportation systems to meet the economic, transportation, and public health and safety needs of the State of Alaska and/or communities within National Petroleum Reserve-Alaska.</p> <p>d. Kikiakrorak and Kogosukruk Rivers: A 2-mile setback from the top of the bluff (or ordinary high watermark if there is no bluff) on the Kikiakrorak River downstream from T2N., R4W, U.M. and on the Kogosukruk River (including Branch of Kogosukruk River, Henry Creek, and two unnamed tributaries off the southern bank) downstream from T2N, R3W, U.M. The setback from these streams in the named townships and further upstream as applicable will be a ½- mile from the top of the bluff or bank if there is no bluff. Note: This measure would be applied to relevant new leases. On lands unavailable for leasing in the respective alternatives, K-1 would be a best management practice. The decision indicated below in subparagraphs (a) and (d) modify Protection 1 of the Colville River Special Area Management Plan by widening its applicability to 2 miles.</p>
<p>Protection 2 Objective: Prevent or minimize loss of arctic peregrine falcon foraging habitat in the CRSA</p> <p>Requirement/Standard: To minimize the direct loss of arctic peregrine falcon foraging habitat in the CRSA the following measures apply: If necessary to</p>	<p>K-7 Lease Stipulation/Best Management Practice - Colville River Special Area</p> <p>Note: This measure would be applied to relevant new leases. On lands unavailable for leasing, K-7 would be a best management practice.</p> <p>Objective: Prevent or minimize loss of raptor</p>

<p>Colville River Special Area Management Plan</p> <p>construct permanent facilities within the CRSA, all reasonable and practicable efforts shall be made to locate permanent facilities as far from arctic peregrine falcon nests as feasible. Within 15 miles of arctic peregrine falcon nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal or it is determined that there is no feasible or prudent alternative. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by case basis, and in consultation with appropriate federal and state regulatory and resource agencies, essential pipeline and road crossings will be permitted through these areas where no other feasible or prudent options are available.</p>	<p>National Petroleum Reserve-Alaska IAP/EIS ROD</p> <p>foraging habitat (also see Lease Stipulation K-1).</p> <p><u>Requirement/Standard:</u> If necessary to construct permanent facilities within the Colville River Special Area, all reasonable and practicable efforts shall be made to locate permanent facilities as far from raptor nests as feasible. Additionally, within 15 miles of raptor nest sites, significant alteration of high quality foraging habitat shall be prohibited unless the lessee can demonstrate on a site-specific basis that impacts would be minimal. Of particular concern are ponds, lakes, wetlands, and riparian habitats. Note: On a case-by-case basis, and in consultation with appropriate federal and State regulatory and resource agencies, essential pipeline and road crossings will be permitted through the Colville River Special Area where no other feasible or prudent options are available.</p>
<p>Protection 3</p> <p>Objective: Minimize the effects of low-flying aircraft on <u>arctic peregrine falcons</u> in the CRSA</p> <p><u>Requirement/Standard:</u> To minimize disturbance to nesting arctic peregrine falcons, aircraft authorized by BLM are required to maintain an altitude of at least 1,500 feet above ground level (AGL) when within ½ mile of cliffs identified as arctic peregrine falcon nesting sites from April 15 through August 15. This protection is not intended to restrict flights necessary to conduct wildlife surveys to obtain information necessary to satisfy wildlife data collection requirements. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.</p>	<p>F-1 Best Management Practice</p> <p><u>Objective:</u> Minimize the effects of low-flying aircraft on wildlife, subsistence activities, and local communities.</p> <p><u>Requirement/Standard:</u> The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines (Note: This best management practice is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objectives of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data.):</p> <ol style="list-style-type: none"> Aircraft shall maintain an altitude of at least 1,500 feet above ground level when within ½ mile of cliffs identified as raptor nesting sites from April 15 through August 15 and an altitude of at least 1,500 feet above ground level when within ½ mile of known gyrfalcon nest sites from March 15 to August 15, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from the BLM necessary to plan flight routes when routes may go near falcon nests.

Colville River Special Area Management Plan	National Petroleum Reserve-Alaska IAP/EIS ROD
<p>Protection 4 <u>Objective:</u> Minimize disturbance impacts on nesting arctic peregrine falcons in the CRSA by reducing effects of campsite activity.</p> <p><u>Requirement/Standard:</u> To reduce disturbance from campsite activity to nesting arctic peregrine falcons campsites authorized by BLM, including short and long-term camps and agency work camps, shall be located at least 500 meters from any known arctic peregrine falcon nest site. Exceptions may be granted by the authorized officer on a case-by-case basis.</p>	<p>No equivalent protection was covered in the NPR-A IAP/EIS</p>
<p>Protection 5 <u>Objective:</u> Minimize disturbance impacts to nesting arctic peregrine falcons from authorized activities at cliff sites.</p> <p><u>Requirement/Standard:</u> All users authorized by BLM, including BLM and other agency personnel, shall submit for approval an operational plan that includes dates, locations, and schedule of visits to cliff sites, when dates are between April 15 and August 15. The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any cliff per nesting season (April 15 through August 15) by all authorized users shall be limited to three. Exceptions may be granted if the detailed operations plan documents why the necessary work could be done no other way. Raptor biologists must coordinate their activities with the BLM, U.S. Fish and Wildlife Service (USFWS), Alaska Department of Fish and Game (ADF&G) and the North Slope Borough (NSB); follow the guidelines for conduct activities near arctic peregrine falcon nests; and follow Protection 4 regarding campsite placement. Exceptions to this requirement may be granted when necessary to conduct certain studies.</p>	<p>No equivalent protection was covered in the NPR-A IAP/EIS</p>
<p>Protection 6 <u>Objective:</u> Minimize disturbance impacts to arctic peregrine falcons in the CRSA from construction and non-emergency clean up.</p> <p><u>Requirement/Standard:</u> To reduce disturbance</p>	<p>No equivalent protection was covered in the NPR-A IAP/EIS</p>

Colville River Special Area Management Plan	National Petroleum Reserve-Alaska IAP/EIS ROD
<p>impacts to arctic peregrine falcons in the CRSA, off-road foot traffic construction or non-emergency hazardous materials or solid waste clean-up efforts within 1 mile of known arctic peregrine falcon nests shall be prohibited during the period April 15 through August 15.</p> <p>Construction refers to building permanent facilities, not those used in winter only. Non-emergency clean-up refers to remediation of old sites, such as removal of drums, buildings with asbestos, or soil that has been contaminated longer than one season. Off-road foot-traffic refers to human activity (walking) associated with construction or clean-up, occurring off the gravel road or pad, or off the immediate site clean-up.</p>	
<p>Protection 7</p> <p>This protection has been adapted from C-2 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p>Objective: Minimize disturbance impacts to nesting arctic peregrine falcons in the CRSA from motorized ground-vehicle use.</p> <p>Requirement/Standard Motorized ground-vehicle use within the CRSA authorized by BLM shall be minimized within one mile of any known arctic peregrine falcon nest from April 15 through August 15. Such use shall be prohibited within ½ mile of nests during the same period unless an exception is granted by BLM.</p>	<p>C-2 Best Management Practice</p> <p><u>Objective:</u> Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.</p> <p><u>Requirement/Standard:</u></p> <p>f. Motorized ground-vehicle use within the Colville River Special Area associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within an area that extends 1 mile west or northwest of the bluffs of the Colville River, and 2 miles on either side of the Kogosukruk and Kikiakrorak rivers and tributaries of the Kogosukruk River 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 1/2 mile away from known raptor nesting sites, unless authorized by the authorized officer.</p>
<p>Protection 8</p> <p>This protection has been adapted from E-16 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p>Objective: Minimize impacts to arctic peregrine falcon in the CRSA from power lines.</p> <p>Requirement/Standard: To minimize impacts to arctic peregrine falcons in the CRSA from the power lines, construction projects will comply with the most up to date suggested practices for arctic</p>	<p>E-16 Best Management Practice</p> <p><u>Objective:</u> Prevent or minimize the loss of raptors due to electrocution by power lines.</p> <p><u>Requirement/Standard:</u> Comply with the most up-to-date industry-accepted suggested practices for raptor protection on power lines. Current accepted standards were published in <i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i> by the Avian Power Line Interaction Committee and are updated as needed.</p>

Colville River Special Area Management Plan	National Petroleum Reserve-Alaska IAP/EIS ROD
<p>peregrine falcon protection on power lines. All power lines and poles shall be designed and constructed in a manner which reflects safe configurations to prevent death of arctic peregrine falcons by electrocution (BLM 2008b).</p>	
<p>Protection 9 This protection has been adapted from E-15 ROP from the Record of Decision for the Northeast NPR-A Supplemental IAP/EIS (BLM 2008b).</p> <p>Objective: Minimize impacts from sand and/or gravel extraction to arctic peregrine falcons in the CRSA.</p> <p>Requirement/Standard: To reduce impacts to arctic peregrine falcons in the CRSA from sand or gravel extraction the following measures apply:</p> <ol style="list-style-type: none"> Removal of greater than 100 cubic yards of sand and/or gravel from cliffs shall be prohibited. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs (BLM 2008b). 	<p><i>E-15 Best Management Practice</i> Objective: Prevent or minimize the loss of nesting habitat for cliff nesting raptors.</p> <p><u>Requirement/Standard:</u></p> <ol style="list-style-type: none"> Removal of greater than 100 cubic yards of bedrock outcrops, sand, and/or gravel from cliffs shall be prohibited. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs.

EXHIBIT E

BIDDER FORM AND ENVELOPE

Bidders are strongly urged to use the attached formats for the bid form and envelope. A blank bid form is provided which may be copied and filled in.

Additional Information:

- 1. Name of bidding entity, official address, Tract Number.**
- 2. Use large boldface type-style, such as Times New Roman Bold - 12 pt.**
- 3. A statement must be included on the bid form acknowledging that the bidder(s) understand that they are legally required to comply with all applicable regulations.**
- 4. Amount Bid must be in whole dollar figure.**
- 5. Indicate “Amount of payment submitted with bid” (right column).**
- 6. Proportional interest of joint bids must not exceed 5 decimal places; total must always equal 100%. There is no limit to the number of joint bidders that may participate.**
- 7. Type Signer’s name under signature; each joint bidder must sign.**

SAMPLE BID FORM

Bureau of Land Management
 Alaska State Office
 222 W. 7th Avenue, #13
 Anchorage, Alaska 99513-7504

NPR-A Oil and Gas Lease Sale 2018

Date of Sale: _____

Bid Submitter: _____

NPR-A OIL AND GAS LEASE BID

It is understood that this bid legally binds the bidder(s) to comply with the regulations in Title 43 Code of Federal Regulations Subpart 3132, other applicable regulations, and requirements of the Detailed Statement of Sale.

The following bid is submitted for an oil and gas lease for the tract specified below:

Tract Number	Amount Bid	Amount of Payment Submitted with Bid
--------------	------------	--------------------------------------

_____	_____	\$ _____
-------	-------	----------

Bidder Name	Percent Interest	Name(s), Address(es), and Signature(s)
-------------	------------------	--

_____	_____	
-------	-------	--

By: _____

By: _____

_____	_____
-------	-------

By: _____

TOTAL:	<u>100.00</u>
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SAMPLE OF BID FORM

Bureau of Land Management
 Alaska State Office
 222 W. 7th Avenue, #13
 Anchorage, Alaska 99513-7504

NPR-A Oil and Gas Lease Sale 2018
 Date of Sale: _____
 Bid Submitter: **Let's Explore**

NPR-A OIL AND GAS LEASE BID

It is understood that this bid legally binds the bidder(s) to comply with the regulations in Title 43 Code of Federal Regulations Subpart 3132, other applicable regulations, and requirements of the Detailed Statement of Sale.

The following bid is submitted for an oil and gas lease on the tract specified below:

Tract Number	Amount Bid	Amount of Payment Submitted with Bid
<u>2018-X-XXX</u>	<u>\$6,157,623</u>	<u>\$1,231,524.60</u>
 Bidder Name	 Percent Interest	 Name(s), Address(es), and Signature(s)
<u>Explorer LTD.</u>		<u>33.33</u> <u>Explorer LTD</u> <u>Box 123456</u> <u>Dime Box, Texas 12345</u> By: <u>(signature)</u> <u>I. W. In</u> <u>Vice President</u>
 <u>Oil Musher's Inc.</u>	 <u>33.33</u>	<u>Oil Musher's Inc.</u> <u>General Delivery</u> <u>Cicely, Alaska 99000</u> By: <u>(signature)</u> <u>M. E. Too, II</u> <u>Attorney-in-Fact</u>
 <u>Let's Explore</u>	 <u>33.34</u>	<u>Let's Explore</u> <u>246 Muskeg Lane</u> <u>Anchorage, Alaska 99000</u> By: <u>(signature)</u> <u>I. Al So</u> <u>President</u>
 TOTAL:	 <u>100.00</u>	

Sample Bid Envelope

1. Use standard size envelopes not to exceed 4-1/2" x 10-1/2" when submitting bids.
2. Use large boldface type, such as Times New Roman Bold - 12 pt.

Let's Explore

Tract No.

**SEALED BID FOR NPR-A OIL AND GAS LEASE SALE 2018
NOT TO BE OPENED UNTIL 10:00am, December 12, 2018**

EXHIBIT F

BIDDER CONTACT FORM

EXHIBIT F

United States Department of the Interior
Bureau of Land Management
Alaska State Office
222 W. 7th Avenue, #13
Anchorage, AK 99513-7504

Bidder Contact Form
NPR-A Oil and Gas Lease Sale

Bidder Name: _____
(Bidder submitting bids)

Signature: _____

Title _____

Area Code - Phone Number _____

Date _____

I. Payments and Refunds

Indicate below the contact for notification of bid acceptance and payment instructions for the 1/5th bonus and first year rental amounts (please also indicate an alternate):

(Name) (Alternate)

(Company or Bidder)

(Area Code - Phone Number)

(Area Code - Fax Number)

II. Deliver Leases to: (Federal Express requires Street Address and Zip Code)

(Company/Bidder)

(Street)

(City) (State) (Zip)

(Attention)

(Area Code - Phone Number)

III. Return of Unsuccessful Checks

The bid deposit check or checks for unsuccessful bids will be returned to only one bidder within a bidding combine. Indicate preferred method of delivery:

☐ Pick-up at Alaska State Office

(Individual Authorized to Pick up Checks)

(Company/Bidder)

(Area Code - Phone Number)

☐ Mail to: (Federal Express requires Street Address and Zip Code)

(Company/Bidder)

(Street)

(City) (State) (Zip)

(Attention)

(Area Code - Phone Number)

IV. Return of Deposit for Rejected Bids

All refunds for rejected bids will be made to only one bidder within a bidding combine. Indicate in which manner you would like these refunds returned.

☐ Mail ☐ Pick-up at Alaska State Office

(Name of Authorized Individual)

(Address)

(City) (State) (Zip)

(Phone Number)

EXHIBIT G

Oil and Gas Lease Bond Form 3000-4

Form 3000-4
(June 1988)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL AND GAS OR GEOTHERMAL LEASE BOND

Act of February 25, 1920 (30 U.S.C. 181 et seq.)
Act of August 7, 1947 (30 U.S.C. 351-359)
Department of the Interior Appropriations Act, FY 1981 (42 U.S.C. 6508)
Act of December 24, 1970 (30 U.S.C. 1001-1025)
Other Oil and Gas and Geothermal Leasing Authorities as Applicable

Bond Number

Lease Serial Number (For Individual Bond Only)

CHECK ONE OIL AND GAS GEOTHERMAL RESOURCES

CHECK ONE

SURETY BOND

KNOW ALL BY THESE PRESENTS, THAT _____ (name)
of _____ (address)
as principal, and _____ (name)
of _____ (address), as surety,
are held and firmly bound unto the United States of America in the sum of _____
_____ dollars (\$ _____),
lawful money of the United States, which may be increased or decreased by a rider hereto executed in the same manner as this bond.

PERSONAL BOND

KNOW ALL BY THESE PRESENTS, That _____ (name)
of _____ (address), as principal, is held and firmly
bound unto the United States of America in the sum of _____
_____ dollars (\$ _____), lawful money of the United States which sum may be
increased or decreased by a rider hereto executed in the same manner as this bond.

The principal, in order to more fully secure the United States in the payment of the aforesaid sum, hereby pledges as security therefore United States negotiable securities of a par value equal to the amount specified. The principal, pursuant to the authority conferred by Section 1 of the Act of September 13, 1982 (31 U.S.C. 9303), does hereby constitute and appoint the Secretary of the Interior to act as his attorney. The interest accruing on the United States securities deposited, in the absence of any default in the performance of any of the conditions, or stipulations set forth in this bond and the instrument(s) granting rights and interests in Federal lands, must be paid to the principal. The principal hereby for himself/herself, any heirs, executors, administrators, successors, and assigns, joint and severally, ratifies and confirms whatever the Secretary shall do by virtue of these presents.

The principal/surety shall apply this bond or the Secretary shall transfer this deposit as security for the faithful performance of any and all of the conditions and stipulations as set forth in this bond and the instruments granting rights and interests in Federal lands. In the case of any default in the performance of the conditions and stipulations of such undertaking, it is agreed that: (1) for a Surety Bond, the surety/principal shall apply the bond or any portion thereof; (2) for a Personal Bond, the Secretary shall have full power to assign, appropriate, apply or transfer the deposit or any portion thereof, to the satisfaction of any damages, assessments, late payment charges, penalties, or deficiencies arising by reason of such default.

This bond is required for the use and benefit of (1) the United States; (2) the owner of any of the land subject to the coverage of this bond, who has a statutory right to compensation in connection with a reservation of the oil and gas and geothermal deposits to the United States; (3) any lessee, permittee, or contractor, under a lease, permit, or resource sale contract issued, or to be issued, by the United States covering the same land subject to this bond, covering the use of the surface or the prospecting for, or the development of other mineral deposits in any portion of such land, to be paid to the United States. For such payment, well and truly to be made, we bind ourselves and each of our heirs, executors, administrators, successors, and assigns, jointly and severally.

This bond shall cover all surface disturbing activities related to drilling operations on a Federal leasehold(s) in accordance with authorization(s) granted under the Acts cited above for:

CHECK ONE:

- NATIONWIDE BOND — Operations conducted by or on behalf of the principal(s) or on the leasehold(s) of the principal(s) in the United States including the National Petroleum Reserve in Alaska (NPR-A) when a rider sufficient to bring the amount in conformance with 43 CFR 3134 is provided, and provided a rider is obtained, also coverage of multiple exploration operations.
- STATEWIDE BOND — Operations conducted by or on behalf of the principal(s) or on the leasehold(s) of the principal(s), except the NPR-A, and, provided a rider is obtained, also coverage of multiple exploration operations within the single state of _____.
- INDIVIDUAL BOND — Operations conducted by or on behalf of the principal or on the leasehold of the principal on the single lease identified by the serial number above.
- NATIONAL PETROLEUM RESERVE IN ALASKA (NPR-A) BOND — This bond shall cover:
- NPR-A LEASE BOND — The terms and conditions of a single lease.
- NPR-A WIDE BOND — The terms and conditions of all leases. and provided a rider is obtained, coverage of multiple exploration operations.

(Continued on page 2)

BOND CONDITIONS

The conditions of the foregoing obligations are such that:

1. WHEREAS the principal has an interest in a lease(s) and/or responsibility for operations on a lease(s) issued under the Acts cited in this bond; and

2. WHEREAS the principal and surety agree(s) that with notice to the surety the coverage of this bond, in addition to the present holding(s) of and/or authorization(s) granted to the principal, shall extend to and include:

a. Any lease(s) hereafter issued to or acquired by the obligor/principal, except under individual lease bonds, the coverage is to be confined to the principal's holding(s) and/or authorization(s) granted under the Acts cited in this bond, and to become effective immediately upon such authorization, approval or issuance of a transfer in favor of the principal; and

b. Any transfer(s) of operating rights hereafter entered into or acquired by the principal affecting lease(s); and

c. Any activity subsequent hereto of the principal as operator under a lease(s) issued pursuant to the Acts cited in this bond; and

Provided, That the surety may elect to terminate the additional coverage authorized under this paragraph. Such termination will become effective 30 days after the BLM receives notice of the election to terminate. After the termination becomes effective, the additional interest(s) identified in this paragraph will not be covered by this bond; and

3. WHEREAS the principal and surety agree(s) that with notice to the surety that this bond shall remain in full force and effect notwithstanding: Any assignment(s) of an undivided interest in any part or all of the lands in the lease(s) in which event the assignee(s) shall be considered to be coprincipal(s) on an individual or NPR-A bond as fully and to the same extent as though his/her or their duly, authenticated signatures appeared thereon; and

4. WHEREAS the obligor/surety hereby waives any right to notice of, and agrees that this bond shall remain in full force and effect notwithstanding:

a. Any assignment(s) of 100% of some of the lands described in the lease(s), the bond to remain in full force and effect only as to the lands retained in the lease(s); and

b. Any transfer(s) either in whole or in part, of any or all of the operating rights and further agrees to remain bound under this bond as to the interests in the operating rights retained by the principal; and

c. Any modification of a lease or operating right, or obligation thereunder, whether made or effected by commitment of lease or operating right to unit, cooperative, communitization or storage agreements, or development contracts, suspensions of oper-

ations or production, waivers, suspensions or changes in rental, minimum royalty and royalties, compensatory royalty payments, or otherwise; and

d. Any extension of a lease(s) covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth in the lease(s); and

5. WHEREAS the principal and surety hereby agree(s) that notwithstanding the termination, expiration, cancellation or relinquishment of any lease(s), whether by operation of law or otherwise, the bond shall remain in full force and effect as to the terms and conditions of all remaining leases and obligations covered by the bond; and

6. WHEREAS the principal, as to any lease or part of a lease for land on which he/she is the operator, in consideration of being permitted to furnish this bond in lieu of the lessee(s) or operating rights owner(s), agrees and by these presents does hereby bind himself/herself to fulfill on behalf of each lessee or operating rights owner all obligations of such for the entire leasehold in the same manner and to the same extent as though he/she were lessee or operating rights owner; and

7. WHEREAS the obligor/principal and surety agree(s) that the neglect or forbearance of said lessor in enforcing, as against any responsible party, the payment of rentals or royalties or the performance of any other term or condition of the lease(s) shall not, in any way, release the principal and surety, or either of them from any liability under this bond; and

8. WHEREAS the principal and surety agree(s) that in the event of any default under the lease(s) the lessor may commence and prosecute any claim, suit, or other proceeding against the principal and surety or either of them, without the necessity of joining the lessee(s); and

9. WHEREAS if the principal fails to comply with any provisions of an oil and gas lease, and the noncompliance continues for thirty (30) days after written notice thereof, such lease shall be subject to cancellation and the principal shall also be subject to applicable provisions and penalties of the Federal Oil and Gas Royalty Management Act (30 U.S.C. 1701 et seq.) or the Federal Onshore Oil and Gas Leasing Reform Act. This provision shall not be construed to prevent the exercise by the United States of any other legal and equitable remedy, including waiver of the default.

10. NOW, THEREFORE If said principal, his/her heirs, executors, administrators, successors, or assigns shall in all respects faithfully comply with all of the provisions of the instrument(s) granting rights and interests in Federal lands referred to above, then the obligations are to be void; otherwise to remain in full force and effect.

Signed this _____ day of _____, 20____, in the presence of:

NAMES AND ADDRESSES OF WITNESSES

_____, (L.S.)
(Principal)
_____,
(Business Address)
_____, (L.S.)
(Surety)
_____,
(Business Address)

If this bond is executed by a corporation, it must bear the seal of that corporation.

EXHIBIT H

Geophysical Exploration Rider Form **For use with NPR-A**

EXHIBIT H

**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ALASKA STATE OFFICE – ANCHORAGE, ALASKA**

**NATIONAL PETROLEUM RESERVE-ALASKA WIDE
OIL AND GAS LEASE BOND
GEOPHYSICAL EXPLORATION RIDER**

**Department of the Interior Appropriations Act, Fiscal Year 1981 (P.L. 96-514)
Other Oil and Gas Leasing Authorities as Applicable**

=====

Coverage under National Petroleum Reserve-Alaska Oil and Gas Lease Bond, which has been assigned Serial Number _____, or which is being filed concurrently with this rider in the Alaska State Office of the Bureau of Land Management, is hereby extended to include oil and gas exploration operations as prescribed by the regulations at 43 CFR 3152.

=====

Signed this _____ day of _____, 20__ in the presence of:

NAMES AND ADDRESSES OF WITNESSES:

(Signature of Witness)

(Signature of Principal)

(Address)

(Business Address)

(Signature of Witness)

(Signature of Surety)

(Address)

(Business Address)

=====

EXHIBIT I

Sample Lease Form **AK-3130-1**

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ALASKA STATE OFFICE
OFFER TO LEASE AND LEASE FOR OIL AND GAS**

The undersigned (page two) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Naval Petroleum Reserves Production Act of 1976 (42 U.S.C. 6501 et seq.), as amended.

READ INSTRUCTIONS BEFORE COMPLETING

1. Name

Street

City, State, Zip Code

2. This application/offer/lease is for Public Domain Lands in the National Petroleum Reserve in Alaska (NPR-A)

Legal description of land requested:

*Tract No.: _____ * Sale Date (m/d/y): _____ / _____ / _____

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____ Rental fee \$ _____ Total acres applied for _____
Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. _____ R. _____ Meridian _____ State _____ County _____

Total acres in lease _____

Rental retained \$ _____

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provision of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR Part 3130 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

THE UNITED STATES OF AMERICA

Competitive NPR-A Lease (ten years)

by _____
(Signing Officer)

(Title)

(Date)

EFFECTIVE DATE OF LEASE _____

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR Part 3132.1 and the leasing authorities; (3) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or in part.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE

The Privacy Act of 1974 and the regulations at 43 CFR 2.223(d) provide that you be furnished with the following information:

AUTHORITY: 50 Stat. 900; 25 U.S.C. 500

PRINCIPAL PURPOSE: The primary uses of the records are (1) to determine your qualification to receive an oil and gas lease; and (2) to provide information concerning oil and gas leases for administrative and public use.

ROUTINE USES: BLM and the Department of the Interior (DOI) may disclose your information on this form: (1) to members of the public who have a need for the information that is maintained by BLM for public record; (2) to the U.S. Department of Justice, court, or other adjudicative body when DOI determines the information is necessary and relevant to litigation; (3) to appropriate Federal, State, local or foreign agencies responsible for investigating, prosecuting violations, enforcing or implementing this statute, regulation, or lease; and (4) to a congressional office when you request the assistance of the Member of Congress in writing.

EFFECT OF NOT PROVIDING THIS INFORMATION: If you do not furnish all the information required by this form, your application may be rejected.

Duly executed this _____ day of _____, 20____.

(Signature of Lessee or Attorney-in-fact)

LEASE TERMS

Sec. 1. Rentals - Rentals must be paid to the proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are: 5.00 for Area H; \$3.00 for Area L; or as specified in the detailed statement of sale

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, or a well that meets criteria in 43 CFR 3137.82 and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified for those lands not within a participating area.

Failure to pay annual rent, within 30 days after receipt of a Notice of Delinquency shall cause this lease to terminate. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties – Royalties shall be paid to the proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are: 16 2/3% for Area H; 12 1/2% for Area L; or as specified in the detailed statement of sale.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of the lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced and the above royalty rates may be reduced, for all or portions of the lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on the late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas loss or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rules, regulations, orders, or citations issued under FOGRMA or the leasing authority.

Sec. 3. Bonds – A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage – Lessee must exercise reasonable diligence in developing and producing, and must prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves the right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection – Lessee shall file with the proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that support costs claimed as manufacturing,

preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting office for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552)

Sec. 6. Conduct of operations – Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with the rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If, in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations – To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium – Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provision of this section.

Sec. 9. Damages to property – Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity – Lessee shall pay when due, all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States, maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors shall maintain segregated facilities. During the performance of this lease, the lessee must comply fully with paragraphs (1) through (7) of 41 CFR 60-1.4(a) with respect to employment discrimination on the basis of race, color, religion, sex, or national origin, and must incorporate the requirements set forth in those paragraphs in every subcontract or purchase order, as provided by that regulation.

Sec. 11. Transfer of lease interests and relinquishment of lease – As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office, a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises – At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor, and within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default – If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains;

- (a) a well capable of production of oil and gas in paying quantities or
- (b) meets criteria under 43 CFR 3135.1-5 or

The lease is committed to an approved cooperative or unit plan or communitization agreement which;

- (a) contains a well capable of production of unitized substances in paying quantities or
- (b) meets the criteria under 43 CFR 3137.70 and 43 CFR 3137.82.

This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. As such, remedy or waiver shall prevent later cancellation of the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGPMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest – Each obligation of this lease shall extend to and be binding upon and every benefit hereof shall inure to: the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

Sec. 15. This lease represents a tract in the NPR-A that is subject to the stipulations and best management practices established by the Record of Decision for the current NPR-A Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) for the National Petroleum Reserve in Alaska.

INSTRUCTIONS

A. General

1. The front of this form is to be completed only by parties filing for a noncompetitive lease. The BLM will complete front of the form for all other types of leases.
2. Entries must be typed or printed plainly in ink. Offeror must sign Item 4 in ink.
3. An original and two copies of this offer must be prepared and filed in the proper BLM State Office. See regulations at 43 CFR 1821.10 for office locations.
4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

B. Special:

Item 1 - Enter offeror's name and billing address.

Item 2 - A single tract number and Sale Date shall be the only acceptable description.

Item 3 - This space will be completed by the United States.

PAPERWORK REDUCTION ACT STATEMENT

The Paperwork Reduction Act of 1990 (44 U.S.C. 3501 et seq.) requires us to inform you that:

1. This information is being collected pursuant to the law.
2. This information will be used to create and maintain a record of oil and gas lease activity.
3. Response to this request is required to obtain a benefit.

EFFECT OF NOT PROVIDING INFORMATION - If you do not provide all the information, the offer may be rejected. See regulations at 43 CFR Part 3130.