United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Anchorage Field Office
4700 BLM Road
Anchorage, Alaska 99507-2591
http://www.blm.gov/ak

Terra Kotzebue Geotechnical
Categorical Exclusion, DOI-BLM-AK-A010-2012-0028-CX

Case File, AA-93309

DECISION RECORD

Decision

It is my decision to implement the proposed action, issuance of a one-time short-term right-of-way, on BLM-managed lands as described in the attached Categorical Exclusion documentation, DOI-BLM-AK-A010-2012-0028-CX.

Rationale for the Decision

The proposed action has been reviewed by Anchorage Field Office staff and appropriate Required Operating Procedures will be incorporated during project implementation (attached to Categorical Exclusion). Based on the attached Categorical Exclusion review, I have determined that the proposed action involves no significant impact to the human environment and no further analysis is required.

Appeal Opportunities

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR § 4. To appeal you must file a notice of appeal at the BLM Anchorage Field Office, 4700 BLM Road, Anchorage, Alaska 99507, within 30 days from receipt of this decision. The appeal must be in writing and delivered in person, via the United States Postal Service mail system, or other common carrier, to the Anchorage Field Office as noted above. *The BLM does not accept appeals by facsimile or email*. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR § 4.21 (58 FR 4939, January 19, 1993) for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Except as otherwise provided by law or other pertinent regulation, a petition for a stay of decision pending appeal shall show sufficient justification based on the following standards: (a) The relative harm to the parties if the stay is granted or denied, (b) The likelihood of the appellant's success on the merits, (c) The likelihood of immediate and irreparable harm if the stay is not granted, and (d) Whether the public interest favors granting the stay.

Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the Office of the Solicitor (see 43 CFR § 4.413); Office of the Regional Solicitor, Alaska Region, U.S. Department of the Interior, 4230 University Drive, Suite 300, Anchorage, Alaska 99508; at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

/s/ Doug Ballou for *07/12/2012*

James M. Fincher
Anchorage Field Manager

Date

Attachments

1. Categorical Exclusion documentation, DOI-BLM-AK-A010-2012-0028-CX

United States Department of the Interior

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CATEGORICAL EXCLUSION (CX)

A. BACKGROUND

Project Name / Type: Terra Kotzebue Geotechnical

NEPA Register Number: DOI-BLM-AK-A010-2012-0028-CX

Case File Number: AA-93309

Location / Legal Description:

Kateel River Meridian, Alaska
T. 9 N., R. 9 W., Sec. 21 (Harvey Repeater)
T. 9 S., R. 10 W., sec. 21, 28 (Ungalik Repeater)
T. 4 S., R.10 W., sec. 33, 34 (Dime Repeater)
T. 13 N., R. 15 W., Sec. 14 (Baldwin Peninsula Repeater)
T. 1 N., R. 9 W., Sec. 4 (Talik Repeater) (within)

Applicant (if any): Unicom Incorporated

Description of Proposed Action:

Unicom Incorporated (Unicom) proposes to test the rock type and suitability of the rock substrate by hand shovels and or drill rig for five proposed future communication repeaters. If drilling is needed, it will take up to three days on site and each site would need two holes. The drill rig, a CME-45, would be slung to the site by helicopter along with an air compressor. Each site will take approximately 10 helicopter landings to mobilize equipment and personnel (up to six people) on site. Each hole will be drilled to a depth of 25 to 30 feet and the boring diameter would be two inches. A one-inch PVC pipe will be cut at ground level and left in each borehole. Unicom will remove all portable tents, equipment, trash, and debris from each site and comply with all applicable Required Operating Procedures (ROP's) identified in the Kobuk-Seward Peninsula Resource Management Plan (attached). The work is proposed to occur in the summer of 2012 (July through August).

B. LAND USE PLAN CONFORMANCE

Applicable Land Use Plan: Kobuk-Seward Peninsula Resource Management Plan, September 2008; Southwest Management Framework Plan November 1981

The proposed action is in conformance with the above land use plan and management framework plan because it is specifically provided for in the following planning decisions:

Kobuk-Seward Peninsula RMP:

The Proposed Action is addressed by Lands and Realty decision *H-2-a 6.: Management Actions (Land Use Authorizations)* which states:

> 6. Rights-of-way
>
> a. Rights-of-way (ROWs) will be located near other ROWs or on already disturbed areas to the extent practical
> b. Communication site ROWs shall be collocated when feasible
> c. Public use cabins may be constructed under a ROW reservation

Southwest Management Framework Plan:

The Proposed Action is addressed by Lands, L-1.3 which states:

> Make public lands available for the development of electronic communications facilities sites.

C. CATEGORICAL EXCLUSION

The proposed action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with United States Department of the Interior 43 CFR § 46.210 or United States Department of the Interior Manual, Part 516, Chapter 11, which provides:

> E. Realty. 20. One-time issuance of short-term (3 years or less) rights-of-way or land use authorizations which authorize trespass action where no new use or construction is allowed, and where the proposal includes rehabilitation to restore the land to its natural or original condition.

D. EXTRAORDINARY CIRCUMSTANCES

The proposed action must be screened against the Extraordinary Circumstances found in 43 CFR § 46.215 (listed below). Any "yes" finding requires that an Environmental Assessment or Environmental Impact Statement be prepared for the Proposed Action.

EXTRAORDINARY CIRCUMSTANCES	YES/NO
1. Have significant adverse impacts on public health or safety.	No
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.	No
3. Have highly controversial environmental effects or involve unresolved conflicts	No

concerning alternative uses of available resources [NEPA Section 102(2)(E)].	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.	No
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.	No
6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.	No
7. Have significant impacts on properties listed, or eligible for listing on the National Register of Historic Places as determined by either the bureau or office.	No
8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.	No
9. Violate Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.	No
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).	No
11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).	No
12. Contribute to the introduction, continued existence, or spread of weeds or non-native invasive species known to occur in the area or area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).	No

E. SIGNATURE

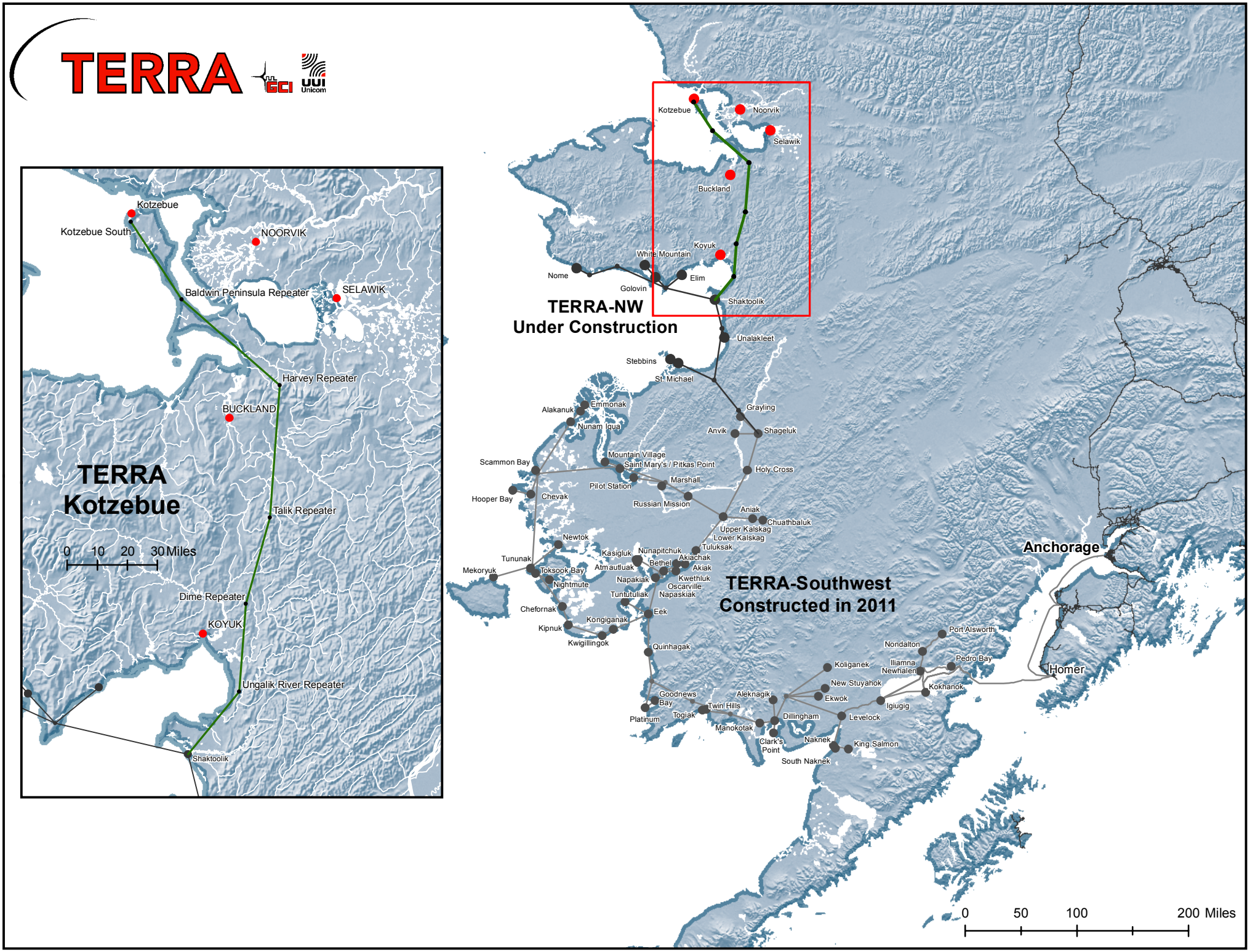
The proposed action is in conformance with the applicable land us plan and is an action that can be categorically excluded. The Proposed Action does not trigger any of the Extraordinary Circumstances found in 43 CFR § 46.215. I recommend that the Proposed Action be allowed and that no further environmental analysis is required.

/s/ Doug Ballou for *07/12/2012*

James M. Fincher Date
Anchorage Field Manager

Attachments

1. Required Operating Procedures from the Kobuk-Seward Resource Management Plan and Record of Decision
2. Map of proposed test site locations


TERRA
GCI
Unicom
Kotzebue
Noorvik
Selawik
Buckland
Koyuk
White Mountain
Nome
Elim
Golovin
Shaktoolik
TERRA-NW
Under Construction
Unalakleet
Stebbins
St. Michael
Alakanuk
Emmonak
Nunam Iqua
Grayling
Anvik
Shageluk
Scammon Bay
Mountain Village
Saint Mary's / Pitkas Point
Holy Cross
Pilot Station
Marshall
Hooper Bay
Chevak
Russian Mission
Aniak
Chuathbaluk
Upper Kalskag
Lower Kalskag
Tuluksak
Newtok
Nunapitchuk
Kasigluk
Akiachak
Tununak
Bethel
Akiak
Mekoryuk
Atmautluak
Toksook Bay
Napakiak
Kwethluk
Nightmute
Oscarville
Napaskiak
Tuntutuliak
Eek
Chefornak
Kongiganak
Kipnuk
Kwigillingok
Quinhagak
TERRA-Southwest
Constructed in 2011
Anchorage
Port Alsworth
Nondalton
Pedro Bay
Koliganek
Iliamna
Newhalen
Homer
New Stuyahok
Kokhanok
Ekwok
Igiugig
Aleknagik
Goodnews
Bay
Twin Hills
Levelock
Platinum
Togiak
Dillingham
Manokotak
Clark's
Point
Naknek
King Salmon
South Naknek
0 50 100 200 Miles
TERRA
Kotzebue
Kotzebue
Kotzebue South
NOORVIK
Baldwin Peninsula Repeater
SELAWIK
Harvey Repeater
BUCKLAND
Talik Repeater
0 10 20 30 Miles
Dime Repeater
KOYUK
Ungalik River Repeater
Shaktoolik

Appendix A: Standard Oil and Gas Lease Terms, Oil and Gas Lease Stipulations, and Required Operating Procedures

Appendix A: Standard Oil and Gas Lease Terms, Oil and Gas Lease Stipulations, and Required Operating Procedures

A. Introduction

The Alaska Statewide Land Health Standards (AK LHS) were developed by the BLM Resource Advisory Council and signed by the State Director on March 2, 2004 (I.M. AK 2004-023). These offer guidance in achieving plan objectives, meeting the standards, and fulfilling the fundamentals of land health. Guidelines are applied in accordance with the capabilities of the resource in consultation, cooperation, and coordination with permittees or lessees, public land users, and the interested public. Guidelines enable managers to adjust management on public lands to meet current and anticipated climatic and biological conditions, while considering cultural and local economic needs. The general guidelines under the AK LHS were used to develop the objectives in the following sections.

There are many Federal, State, and local laws, regulations and permitting requirements that must be met before activities may occur. Some requirements would be placed directly on the applicant. Others would be required of Federal agencies prior to granting authorizations. In developing these stipulations and required operating procedures (ROP), BLM has tried not to include requirements that already exist in the form of regulation or law. Laws or regulations may require other Federal, State, and local permits (e.g., Clean Water Act Section 404) for a project to proceed. Specific State permits are required when the State has primary 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 presented below.

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 or as part of the application proposal. 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 ROPs will be identified in the Record of Decision (ROD) as operational requirements, not as lease stipulations, their applicability goes beyond the oil and gas lease to any permitted activity where the requirement is relevant.

1. Standard Oil and Gas Lease Terms

*This section was moved from section 3 to section 1 with minor wording changes in the first paragraph and deletion of the second original paragraph.

The Standard Lease Terms are contained in Form 3100-11, Offer to Lease and Lease for Oil and Gas, U.S. Department of the Interior, BLM, October 1992 or later addition (BLM 1992). Form 3100-11 is standard nationwide and is applied to every lease issued under the Mineral Leasing Act by the BLM. The Standard Lease Terms provide the lessee the right to use the leased land as needed to explore for, drill for, extract, remove, and dispose of oil and gas deposits located under the leased lands. The Standard Lease Terms also require that operations be conducted in a manner that minimizes adverse impacts to the land, air, water, cultural, biological, and visual elements of the environment, as well as other land uses or users. Federal environmental protection laws such as the Clean Water Act, Endangered Species Act, and Historic Preservation Act will be applied to all lands and operations and are included in the Standard Lease Terms. If threatened or endangered species; objects of historic, cultural, or scientific value; or substantial unanticipated environmental effects are encountered during construction, all work affecting the resource will stop, and the land management agency will be contacted.

2. Oil and Gas Leasing Stipulations

Stipulations are specific to oil and gas exploration, development, and production and are included in a lease offer in addition to the standard lease terms. They constitute significant restrictions on the conduct of operations under a lease. For example, a stipulation that does not allow permanent facilities within one-fourth mile of a bird nest could result in a well being located far enough from the (lessee's) optimum site to prevent an oil reservoir from being fully developed. Such restrictions must be attached to the lease. As part of a lease contract, lease stipulations are specific to the lease. All oil and gas activity permits subsequently issued to a lessee would include, as a condition of approval, lease stipulations appropriate to the activity under review.

The following stipulations were adapted from oil and gas leasing stipulations developed for the National Petroleum Reserve-Alaska (NPR-A). For example, a NPR-A stipulation designed to protect caribou from the Teshekpuk Lake Herd was modified to fit the parameters of the Western Arctic Caribou Herd within the planning area. Additional stipulations were developed by an interdisciplinary team of BLM resource specialists. Some stipulations were changed based on public or internal comment on the Draft RMP/EIS.

The Authorized Officer (AO) may add additional conditions of approval to a specific proposal if determined necessary through further NEPA analysis and as developed through consultation with other Federal and State regulatory and resource agencies. Laws or regulations may require other Federal, State, and local government permits 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 provisions in question. Specific permits issued by Federal agencies other than BLM may include permit conditions that are more stringent than those included in this appendix.

Compliance with stipulations is monitored by the AO or their representative. Non-compliance is documented in an Incident of Non-Compliance. Based on the nature of the non-compliance, a time-frame may be established to correct the problem. If it is not corrected, the AO has the discretion on penalties, dependant upon the nature of the problem. Non-compliance can result in monetary fines or operation shut-down.

Surface stipulations could be excepted, modified, or waived by the AO (refer to 43 CFR 3101.1-4). An *exception* exempts the holder of the land use authorization document from the stipulation on a one-time basis. A *modification* changes the language or provisions of a surface stipulation, either temporarily or for the term of the lease. A *waiver* permanently exempts the surface stipulation. A stipulation included in an oil and gas lease shall be subject to modification or waiver only if the AO determines that the factors leading to its inclusion in the lease have changed sufficiently to make the protection provided by the stipulation no longer justified or if proposed operations would not cause unacceptable impacts. If the AO has determined, prior to lease issuance, that the stipulation involves an issue of major concern to the public, modification or waiver shall be subject to public review for at least a 30-day period. In such cases, the stipulation shall indicate that public review is required before modification or waiver. If subsequent to lease issuance the AO determines that a modification or waiver of a lease stipulation is substantial, the modification or waiver shall be subject to public review for at least a 30-day period.

The environmental analysis document prepared for oil and gas development (e.g., Applications for Permit to Drill [APDs] or sundry notices) would address proposals to exempt, modify, or waive a surface stipulation. To exempt, modify, or waive a stipulation, the environmental analysis document would need to show that: 1) the circumstances or relative resource values in the area had changed following issuance of the lease; or 2) less restrictive requirements could be developed to protect the resource of concern; or 3) operations could be conducted without causing unacceptable impacts; or 4) the resource value of concern does not occur within the lease area.

3. Required Operating Procedures

*This section is moved from Section 1 to Section 3 and reworded, has additional text added, and deletes several blocks of text.

Required operating procedures (ROP) are requirements that BLM will impose as necessary, to achieve stated resource management objectives. ROPs are common to all action alternatives and will be considered for all permitted activities including FLPMA leases and permits, Special Recreation Permits, oil and gas operations, coal exploration, mining Plans of Operation, and Right-of-Way authorizations. ROPs are considered during the site-specific analysis that occurs during activity level planning and if adopted, will be applied as conditions of approval to land use authorizations and permits. ROPs are not selected as a condition of the permitted activities if the applicant has included them as part of the proposal or has identified an alternative, such as adoption of best management practice (BMP) to meet stated resource management objectives. Applicants are encouraged to consider alternative methods, best management practices, and/or design features that BLM can consider during the permitting process. If an applicant does not include alternatives for agency consideration, the ROPs identified below will be used when considering approval of a proposed activity.

ROPs have been developed to ensure that the AK LHS are met in carrying out permitted activities and management practices. These ROPs were based on the best information available during development of the RMP/EIS. As the interdisciplinary team of BLM resource specialists evaluated potential required operating procedures, they reviewed guidelines developed by the USFWS or other Federal agencies. They also considered ROPs from the

Northwest National Petroleum Reserve-Alaska Integrated Activity Plan/EIS. ROPs were adapted and modified to fit the situation in the planning area. Finally, some of the ROPs were modified based on public and internal comment on the Draft RMP/EIS. ROPs will continue to evolve as better resource information is gained and/or changes in technology become available. ROPs may be modified as appropriate during the NEPA and permitting process to fit site specific conditions.

The AO or his/her representative is responsible for seeing that the permittee complies with the conditions of the permit. Non-compliance will be documented and a notice will be sent to the permittee, along with corrective actions and a time frame in which the actions are to be completed.

B. Required Operating Procedures

1. Soils

a) Objective Soils-1

Minimize soil erosion by stabilizing disturbed areas as soon as possible. Where permitted operations result in surface disturbance, return land to its pre-disturbance condition to the extent possible.

Required Operating Procedures

ROP Soils-1a All topsoil will be saved in a separate area from overburden for future use.

ROP Soils-1b All overburden will be stockpiled and saved for respreading over tailings.

ROP Soils-1c All overburden piles will be shaped and stabilized to prevent erosion.

ROP Soils-1d Final shape of respread tailing and overburden will approximate the shape of the surrounding terrain.

ROP Soils-1e Disturbed stream banks will be recontoured, revegetated, or other protective measures will be taken to prevent soil erosion into adjacent waters.

ROP Soils 1-f Roads, well pads, and other disturbed areas will be recontoured and revegetated as per an approved reclamation plan or Plan of Operations. Revegetation will occur through seeding of native seed or by providing for soil conditions that allow the site to re-vegetate naturally, whichever provides the most effective means of reestablishing ground cover and minimizing erosion. The final land surface will be scarified to provide seed traps and erosion control.

ROP Soils 1-g Surface disturbing proposals involving construction on slopes greater than 25% will include an approved erosion control strategy, topsoil segregation/restoration plan, be properly surveyed and designed by a certified engineer and approved by the BLM prior to construction and maintenance**.**
**This was previously oil and gas leasing stip 8.*

b) Objective Soils-2

Engineer, construct, and maintain roads and trails in a manner that minimizes the effect on landscape hydrology; concentration of overland water flow, subsurface water flows; minimizes erosion, and minimizes sediment transport.

Required Operating Procedures

ROP Soils-2a Roadways will be ditched on uphill side and culverts or low water crossings installed at suitable intervals. Spacing of drainage devices and water bars will be dependent on road gradient and soil erodibility.

ROP Soils-2b Roads will be designed for minimal disruption of natural drainage patterns.

ROP Soils-2c Roads will be designed to avoid areas with unstable or fragile soils.

ROP Soils-2d Water bars will be placed across reclaimed roads. Spacing will be dependent on road gradient and soil erodibility as shown in the following table.

Table A-1. Recommended Water Bar Spacing

Water Bar Spacing (in feet)			
Gradients (%)	Erosion Class		
	High	Moderate	Low
3-5	200	300	400
6-10	150	200	300
11-15	100	150	200
16-20	75	100	150
21-35	50	75	100
36+	50	50	50

Spacing is determined by slope distance and is the maximum allowed for the grade.

2. Vegetation

a) Objective Veg-1

Treatments to alter the vegetative composition of a site, such as prescribed burning, seeding, or planting will be based on the potential of the site and will: retain or promote infiltration, permeability, and soil moisture storage; contribute to nutrient cycling and energy flow; protect water quality; help prevent the introduction and spread of noxious weeds; contribute to the diversity of plant communities, and plant community composition and structure; and support the conservation of threatened and endangered species, other special status species, and species of local importance.

Required Operating Procedures

ROP Veg-1a Vegetation treatments will be designed to achieve desired conditions clearly described in individual burn, project, or activity plans. Desired conditions will be based on the ecological capability of a given site and will be expressed as cover types or seral stages within cover types, based on management objectives.

ROP Veg-1b Vegetation treatments will be designed to prevent introduction of noxious and invasive weeds. Project, burn, or activity plans will contain a segment on known occurrence of noxious weeds within planned treatment area and strategy for post-burn monitoring or treatment.

ROP Veg-1c Seeding and planting non-native vegetation may be used in those cases where native species are not available in sufficient quantities; where native species are incapable of maintaining or achieving the objective; or where non-native species are essential to the functional integrity of the site, with specific approval from the AO.

ROP Veg-1d In order to eliminate, minimize, or limit the spread of noxious and invasive weeds, only certified feed and mulch (hay cubes, hay pellets, straw, etc,) will be permitted on BLM lands.

ROP Veg-1e Operators must prevent and control noxious and invasive weed infestations. Noxious weeds in Alaska are listed under Alaska Statute 11 AAC 34.020 or other statewide lists that may be developed in the future.

b) Objective Veg-2

Minimize disturbance to vegetative resources from permitted activities.

Required Operating Procedures

ROP Veg-2a Where feasible, existing roads and trails will be utilized.

ROP Veg-2b Bull-dozing of tundra mat and vegetation is prohibited unless there is no feasible alternative (e.g. lode mining), as approved by the AO. If trenching is required, use equipment that minimizes trench width. Clearing of drifted snow is allowed to the extent that the tundra mat is not disturbed.

ROP Veg-2c Location of winter trails will be designed to minimize breakage or compaction of vegetation.

ROP Veg-2d The location of winter ice roads will 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.

ROP Veg-2e Whenever possible, overland moves that are a part of permitted operations will occur when frost and snow cover is sufficient to minimize soil disturbance and compaction. The exact dates will be determined by the AO.

ROP Veg-2f When ground operations are required in snow-free months, routes that utilize naturally hardened sites will be selected to avoid the need for trail braiding. The permittee will work with the AO on specifying vehicle types and methods to minimize vegetation and soil disturbance, such as use of air or water craft, utilizing existing roads or trails, or use of low ground pressure vehicles.

ROP Veg-2g Permanent oil and gas facilities will be designed and located to minimize the development footprint.

ROP Veg-2h Off-highway Vehicle use associated with permitted activities will comply with OHV designations in the area. The use of OHVs associated with permitted activities will be allowed under appropriate stipulations as approved by the AO.

ROP Veg-2i Permitted livestock grazing will be conducted in a manner that maintains long term productivity of vegetation. Animals will not be picketed in riparian areas. In areas of low grass production, operators will pack in weed-free hay or concentrated feed.

ROP Veg-2j Require Special Recreation Permit holders, reindeer herders, dog mushers, and other BLM permit holders to use certified weed-free products on BLM lands.

3. Water, Riparian, and Wetlands

a) Objective Water-1

Manage human use to achieve and maintain water quality standards and avoid waste management problems and water quality impacts.

Required Operating Procedures

ROP Water-1a Projects will be designed to protect water quality and comply with Federal and State water quality standards.

ROP Water-1b Management practices will include public education and construction of toilet facilities where appropriate.

b) Objective Water-2

Land management practices will be directed to avoid or minimize adverse impacts upon the hydrological, habitat, subsistence, and recreational values of public wetlands.

Required Operating Procedures

ROP Water-2a Activities in wetlands will comply with Federal and State permit requirements for alteration of wetlands.

ROP Water-2b Utilize winter access whenever possible and avoid road or trail construction in wetlands.

ROP Water-2c In snow-free months, if wetlands cannot be avoided, low ground pressure vehicles will be used wherever possible.

c) Objective Water-3

Minimize disturbance to riparian areas and facilitate rehabilitation of riparian areas.

Required Operating Procedures

ROP Water-3a Streams must be diverted around mining operations using an appropriately sized bypass channel.

ROP Water-3b All process water and ground water seeping into the operating area must be diverted into the settling pond system for treatment prior to re-entering the natural water system.

ROP Water-3c Settling ponds will be cleaned out and maintained at appropriate intervals to comply with water quality standards. Fine sediment captured in the settling ponds will be protected from washout and left in a stable condition at the end of each mining season to prevent unnecessary or undue degradation to the environment during periods of non-operation.

ROP Water-3d Riparian areas between the mined ore deposit and the watercourse will be maintained in order to serve as a buffer strip between mining operations and watercourses: to protect integrity of stream banks, provide water temperature control, and for filtration of sediment from surface run-off. All roads, bunkhouses, offices, equipment storage, and maintenance facilities should be sited in upland areas. Overburden should be placed on the uplands or on the upland side of the mine pit. This is not intended to preclude activities which by nature must occur within riparian areas, such as placer mining.

ROP Water-3e Streams that have been altered by channeling, diversion, or damming will be restored to a condition that will allow for proper functioning of the riparian zone and stream channels. Active streams will be returned to the natural water course or a new channel will be created at its lowest energy state (valley bottom) that approximates the old natural channel in shape, gradient, and meander frequency using a stable channel design. The new channel will be designed consistent with the capabilities of the reclaimed site.

ROP Water-3f Riparian vegetation, if removed during operations, will be re-established.

ROP Water-3g The value of prime riparian habitat will be considered for protection and mitigation during development of any mineral resources that may impact riparian resources.

d) Objective Water-4

To the extent feasible and prudent, channeling, diversion, or damming that will alter the natural hydrological conditions and have a significant adverse impact upon riparian habitat will be avoided.

Required Operating Procedures

ROP Water-4a All permitted operations will be conducted in such a manner as not to block any stream, or drainage system and to comply with State (Alaska Dept. of Environmental Conservation) and Federal (Environmental Protection Agency) water quality standards. This is not intended to preclude activities which by nature must occur within riparian areas, such as hydropower dams or placer mining.

ROP Water-4b New road construction within floodplains will be avoided. Where necessary, roads will cross riparian areas perpendicular to the main channel.

e) Objective Water-5

Provide for maintenance of proper functioning condition in riparian areas and protection of water quality by minimizing impacts of other permitted activities and vegetation treatments.

Required Operating Procedures

ROP Water-5a Structural and vegetative treatment in riparian and wetland areas will be compatible with the capability of the site, including the system's hydrologic regime, and will contribute to maintenance or restoration of proper functioning condition.

ROP Water-5b Refueling of equipment will not be conducted in riparian areas or within 500 feet of the active floodplain of any fish-bearing waterbody or within 100 feet from non-fish bearing waterbodies. The AO may allow storage and operations at areas closer than the stated distance if properly designed to account for local hydrologic conditions. Spill cleanup equipment will be available at all permitted sites.

ROP Water-5c Crossing of waterway courses will be made using a low-angle (perpendicular) approach. Snow and ice bridges will be removed, breached, or slotted before spring break-up. Ramps and bridges will be substantially free of soil and debris.

ROP Water-5d New structures will be located away from riparian or wetland areas if they conflict with achieving or maintaining riparian or wetland function. Existing structures will be used in a way that does not conflict with riparian or wetland functions or be relocated or modified when incompatible.

ROP Water-5e The design and location of permanent oil and gas facilities within 500 feet of fish-bearing waterbodies or within 100 feet of non fish-bearing waterbodies will only be approved on a case-by-case basis if the lessee can demonstrate that impacts to fish, water quality, and aquatic and riparian habitats are minimal.
**This was previously oil and gas leasing stip 2.*

e) Objective Water-6

Preserve sufficient water quantity to support beneficial uses.

Required Operating Procedures

ROP Water-6a Projects requiring withdrawal of water will be designed to maintain sufficient quantities of surface water, and contributing groundwater, to support fish and wildlife and other beneficial uses.

4. Special Status Species

a) Objective Special Status Species-1

Fish, wildlife, sensitive plants, and habitat will be managed to ensure compliance with the Endangered Species Act (ESA) and to ensure progress towards recovery of listed threatened or endangered species.

Required Operating Procedures

ROP SS-1a The planning area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status. BLM may recommend modifications to proposals to further its policy of avoiding BLM-approved activity that will contribute to a need to list such a species. BLM may either require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed, threatened, or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. 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 ESA as amended, 16 U.S.C. 1531 et seq., including completion of any required procedure for conference or consultation.

ROP SS-1b Within the breeding range of Spectacled eiders, habitat in the project area will be assessed to determine if eiders are likely to use the area for nesting or brood rearing. The following activities will be prohibited within 650 feet (200 meters) of spectacled eider nest sites. 1) Ground level activity (by foot or vehicle) from May 20 through August 1, 2) Construction of permanent facilities, placement of fill, or alteration of habitat, and 3) Introduction of high noise levels within 200 meters of nest sites (from activities at potentially greater distances), May 20 through August 1. These may include but are not limited to: airports, blasting, and compressor stations.

ROP SS-1c Within the breeding range of Kittlitz's murrelet, habitat in the project area will be assessed to determine if murrelet's are likely to use the area for nesting. If nests are found, minimize ground-level disturbance and activity within identified areas of suitable habitat during June–August.

ROP SS-1d Where practical, use will be redirected, as necessary, to protect Federal and State listed and candidate Threatened and Endangered species habitat, to enhance indigenous animal population, and to otherwise maintain public land health through avoidance of sensitive habitat.

ROP SS-1e Where populations or individual sensitive status plant species are located, take measures to protect these populations or individuals through site-specific buffers or management prescriptions.

b) Objective Special Status Species-2

Minimize the take of species listed under the ESA and minimize the disturbance of other species of interest from direct or indirect interaction with large mining facilities or oil and gas development.

Required Operating Procedures

ROP SS-2a In accordance with the guidance below, before the approval of facility construction, aerial surveys of breeding pairs of the following species shall be conducted within any area proposed for development within the breeding range of these species.

Spectacled and/or Steller's Eiders
(a) Surveys will be conducted by the lessee for at least three years before authorization of construction, if such construction is within the FWS North Slope Eider survey area, and at least one year outside that area. Results of aerial surveys and habitat mapping may require additional ground nest surveys. Spectacled and/or Steller's eider surveys will be conducted following accepted BLM-protocol during the second week of June.
b) If spectacled and/or Steller's eiders are determined to be present within the proposed development area, the applicant will consult with the FWS and BLM in the design and placement of roads and facilities in order to minimize impacts to nesting and brood-rearing eiders and their preferred habitats. Such consultation will address timing restrictions and other temporary mitigating measures, construction of permanent facilities, placement of fill, alteration of eider habitat, aircraft operations, and introduction of high noise levels.
c) To reduce the possibility of spectacled and/or Steller’s eiders from striking above-ground utility lines (power and communication), such lines will either be buried in access roads, or suspended on vertical support members, to the extend practical. Support wires associated with communication towers, radio antennas, and other similar facilities, will be clearly marked along their entire length to improve visibility for low flying birds. Such markings will be jointly developed through consultation with FWS.

Yellow-billed Loon
a) Aerial surveys will be conducted by before authorization of construction of facilities proposed for development that are within 1 mile of a lake 25 acres or larger in size. These surveys along shorelines of large lakes will be conducted following accepted BLM protocol during nesting in late June and during brood rearing in late August.
b) 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 buffer around the remainder of the shoreline. Development would be prohibited within buffers.

c) Objective Special Status Species-3

Use ecological mapping as a tool to assess wildlife habitat before development of permanent facilities associated with oil and gas, coal, coal-bed methane or other large mineral developments, to conserve important habitat types, including wetlands, during development.

Required Operating Procedures

ROP SS-3a An ecological land classification map of the development area will 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 analyses of development alternatives. The map will be prepared in time to plan one season of ground-based wildlife surveys, if deemed necessary by the AO, before approval of exact facility location and facility construction.

d) Objective Special Status Species-4

Protect, maintain, and preserve aquatic ecosystems within lakes with known resident and genetically isolated Arctic char in the Kigluaik Mountains (Map 3-14). This ROP would apply under Alternative D only.

Required Operating Procedures

ROP SS-4a All ore processing (mill sites, tailings piles, containment ponds, etc.) must occur outside of watersheds that drain into these lakes.

ROP SS-4b All surface water discharge and drainage from mining operations must be re-directed outside of watersheds that drain into these lakes.

ROP SS-4c All chemicals including fuels will be stored outside of watersheds that drain into these lakes.

ROP SS-4d A person, claimant, operator, applicant or other proponent proposing to use or develop the lands, waters or resources within watersheds that drain into these lakes must demonstrate to the satisfaction of the AO that such use or development will not modify the lakes or their watersheds in such a way that it results in adversely: altering the hydrological, chemical, physical or biological integrity of the lakes; or impacting or diminishing the habitat quantity and quality of the aquatic and riparian ecosystems and watershed functions so that fish populations of the lakes are reduced below their natural potential.

5. Fish and Wildlife

a) Objective Fish and Wildlife-1

Avoid human-caused increases in populations of predators of ground nesting birds.

Required Operating Procedures

ROP FW-1a The best available technology will be used to prevent permanent facilities from providing nesting, denning, or shelter sites for ravens, raptors, and foxes in areas where ground nesting populations are sensitive to increased predation.

b) Objective Fish and Wildlife-2

Maintain and protect fish and wildlife habitat on public lands and provide for the habitat needs of fish and wildlife resources necessary to maintain or enhance such populations.

Required Operating Procedures

ROP FW-2a No road crossings will be permitted in crucial spawning habitat, unless no feasible alternative exists and it can be demonstrated that no adverse effects will occur. State designated stream crossings will be used whenever possible.

ROP FW-2b Vehicular travel up and down streambeds, except by boat, is prohibited during the open water season (May-September).

ROP FW-2c Rivers and streams will be crossed at shallow riffles from point bar to point bar whenever possible.

ROP FW-2d Avoid stream crossings. When a stream must be crossed, the crossing will be as close to possible to a 90-degree angle to the stream. Stream crossings will be made at stable sections in the stream channel.

ROP FW-2e Stream and marsh crossings will be designed and constructed to ensure free passage of fish, maintain natural drainage, and minimal 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.

ROP FW-2f All water intakes will be screened and designed to prevent fish intake.

ROP FW-2g Drilling is prohibited in fish-bearing rivers and streams, as determined by the active floodplain, and fish-bearing lakes, except where 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.

c) Objective Fish and Wildlife-3

Avoid heavy concentration of activities in sensitive fish, wildlife, and plant habitats.

Required Operating Procedures

ROP FW-3a Within the WAH caribou calving and insect relief areas (Map 3-12), mineral exploration activities will not be authorized from May 20-August 15 unless the AO determines that caribou no longer occupy the specific area of the proposed operations. This seasonal restriction can also be modified based on actual caribou occupancy of area.

ROP FW-3b Whenever possible, operations that require vegetation removal will avoid the migratory bird-nesting period of May 1 to July 15 (Area specific dates: May 20-July 20 for Seward Pen; June 1-July 31 for Northern region; and May 1-July 15 for interior). If no feasible alternatives exist, assessment will be conducted to determine bird species present, significance of potential impacts, and possible mitigation measures (FWS Advisory: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska to Protect Migratory Birds. September 2005).

ROP FW-3c Within defined WAH caribou calving areas, the following uses will not be permitted during peak calving (May 20-June 20): 1) surface disturbing activities; 2) FLPMA leases or permits that exceed 14 days of activity; and 3) mining exploration. Aircraft associated with permitted activities will maintain an altitude of at least 2,000 feet above ground level (AGL) (except for takeoffs and landings), unless doing so would endanger human life or violate safe flying practices. This ROP would not apply to Alternative B.

ROP FW-3d Within defined WAH insect relief areas, aircraft associated with permitted activities will maintain an altitude of at least 2,000 feet AGL (except for takeoffs and landings) from June 20-August 15, unless doing so would endanger human life or violate safe flying practices.

ROP FW-3e Exploration and prospecting activities for solid leasable minerals, locatable minerals, and salable minerals will be prohibited between October 31 and April 1 in caribou wintering habitat in the Nulato Hills ACEC unless the operator, applicant, or permittee can demonstrate to the satisfaction of the AO that the activity can be conducted in a manner that will not result in undue disturbance to wintering caribou. This ROP would apply under Alternative D only.

d) Objective Fish and Wildlife-4

Minimize disruption of wildlife movement and subsistence use.

Required Operating Procedures

ROP FW-4a Bridges and culverts will be designed to avoid altering the direction and velocity of stream flow or interfering with migrating, rearing, or spawning activities of fish and wildlife. Bridges and culverts should span the entire non-vegetated stream channel.

ROP FW-4b Pipelines and roads will be designed to allow the free movement of wildlife and the safe, unimpeded passage of the public while participating in traditional subsistence activities. Listed below are the currently accepted design practices: 1) Above ground pipelines will be elevated a minimum of seven feet as measured from the ground to the bottom of the pipeline at vertical support members; 2) 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 AO after conferring with Federal, State, and local government regulatory and resource agencies as appropriate, based on agency legal authority and jurisdictional responsibility; and 3) A minimum distance of 500 feet between pipelines and roads will be maintained when feasible.

e) Objective Fish and Wildlife-5

Minimize the potential for disease transmission from livestock to wildlife.

Required Operating Procedures

ROP FW-5a The use of domestic goats, alpacas, llamas, and other similar species as pack animals in conjunction with permitted activities will not be allowed.

f) Objective Fish and Wildlife-6

Minimize the potential for electrocution of raptors.

Required Operating Procedures

ROP FW-6a Power lines will be constructed in accordance with standards outlined in "Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006" (APLIC 2006). The holder will assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof will be provided by a raptor expert approved by the AO. BLM reserves the right to require modifications or additions to all power line structures, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions will be made by the holder without liability or expense to the United States.

g) Objective Fish and Wildlife-7

Protect, maintain, and preserve the condition and ecological function of the aquatic and riparian zones of streams that determine the ability of these habitats to:

1. provide clean water for community use;
2. produce fish and wildlife on a sustained basis to support cultural, economic, subsistence, and recreational needs; and
3. maintain the hydrological and morphological stability of streams to prevent un-natural flooding, habitat degradation, and water quality impairment.

Required Operating Procedures

ROP FW-7a This ROP applies to the Kivalina River, Ungalik River, Shaktoolik River, Inglutalik River, Koyuk River including the East Fork, Tubutulik River, Kuzitrin River, Agiapuk River, Pah River, and Noatak River. This ROP would apply under Alternative D only.

Any proposal to use or develop the lands, waters, or resources within 300 feet of the banks of active stream channels must demonstrate to the satisfaction of the AO that such use or development:

1. will not adversely alter the condition and ecological function of aquatic and riparian systems by impacting water quality, stream flow, velocity, ground water hydrology, channel connectivity, channel form, material recruitment, substrate composition, energy (food) flow, and riparian function;
2. will not diminish the quality and diversity of habitats needed to sustain the production of fish and wildlife populations at their natural potential; or
3. is outside the flood-prone width of these rivers.

6. Subsistence

a) Objective Subsistence-1

Prevent unreasonable conflicts between subsistence use and permitted activities on BLM managed lands.

Required Operating Procedures

ROP Sub-1a BLM will consider using the following actions to eliminate, minimize, or limit the effects of permitted activities on subsistence use; 1) BLM may recommend modifications to proposed activity to further its policy of effective subsistence management, 2) Permittees will be required to provide information to potentially affected subsistence communities regarding the timing, siting, and scope of the proposed activity, and 3) Permittees will be required to consult with potentially affected subsistence communities to receive input regarding way to minimize impacts to subsistence, and the permittee will be required to provide documentation of their consultation efforts to the BLM.

Also see *FW-4b.*

7. Cultural and Paleontological

a) Objective Cultural and Paleontological-1

Management practices will consider protection and conservation of known cultural resources, including historical sites and prehistoric sites.

Required Operating Procedures

ROP C-1a For permitted activities, cultural resource protection and conservation will be consistent with 1) Sections 106, 110, and 101d of the Historic Preservation Act, 2) procedures under BLM's 1997 Programmatic Agreement for Section 106 compliance, and 3) the BLM's 1998 implementing Protocol in Alaska between BLM and the Alaska State Historic Preservation Officer.

ROP C-1b If necessary, mitigation measures will be implemented according to a mitigation plan approved by the AO. Mitigation plans will be reviewed as part of Section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation will be commensurate with the significance of the cultural resource involved and the anticipated extent of the damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost effective and realistic.

b) Objective Cultural and Paleontological-2

Avoid damage to significant paleontological resources where possible, and mitigate unavoidable damage.

Required Operating Procedures

ROP C-2a For all actions, the BLM will evaluate the impacts of proposed actions to known resources and avoid damage to already-identified significant paleontological resources by avoidance.

ROP C-2b If avoidance is not possible, the applicant will perform scientific examination of the to-be-impacted significant resources followed by appropriate mitigation. This may include the professional collection and analysis of significant specimens by scientists.

8. Visual Resource Management

a) Objective Visual Resource Management-1

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 must 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 the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Required Operating Procedures

ROP VRM-1a To the extent practicable, all permanent facilities will be located away from roadsides, rivers, or trails, thereby using distance to reduce the facility's visual impact.

ROP VRM-1b Access roads and permanent facilities will be designed to meet the visual resource objective using such methods as minimizing vegetation clearing, and using landforms to screen roads and facilities.

ROP VRM-1c Permanent facilities will be designed to be screened behind trees or landforms if feasible so they will blend with the natural surroundings.

ROP VRM-1d The modification or disturbance of landforms and vegetative cover will be minimized.

ROP VRM-1e Permanent facilities will be designed so their shapes, sizes, and colors harmonize with the scale and character of the surrounding landscape.

ROP VRM-1f In open, exposed landscapes, development will be located in the opposite direction from the primary scenic views, if feasible.

9. Fire Management

a) Objective Fire Management-1

Reduce impacts to water quality, riparian habitat, vegetation, soils, and fish habitat from fire suppression activities.

Required Operating Procedures

ROP FM-1a Permitees and casual users will be held financially responsible for any actions or activity that results in a wildland fire. Costs associated with wildland fires include but are not limited to damage to natural or cultural resources and costs associated with any suppression action taken on the fire.

ROP FM-1b The Federal government will not be held responsible for protection of permitees' structures or their personal property. It is the responsibility of permitees and leasees to mitigate and minimize risk to their personal property and structures from wildland fire, if allowed by their permit.

ROP FM-1c Gas powered equipment will be equipped with manufacturer approved and functional spark arrestors.

ROP FM-1d To avoid the potential impacts to aquatic life the use of fire retardant is prohibited except when necessary to protect:

Human life
Permanent year-around residences
National Historic land marks
Structures on or eligible for the National Register of Historic Places
Government Facilities, and
Other designated sites or structures or if necessary to protect high value resources on adjacent lands under other than BLM administration or ownership

Even if one of the above listed resources is being threatened, water will be used instead of fire retardant whenever possible or appropriate. The use of fire suppressant foams is prohibited.

ROP FM-1e Use of tracked or off-road vehicles in fire suppression or management activities will be conducted in a manner that does not cause erosion, damage to riparian areas, degradation of water quality or fish habitat, or contribution to stream channel sedimentation.

ROP FM-1f Use of heavy equipment and other motorized vehicles off road requires approval of AO or designee.

ROP FM-1g Rehabilitate areas burned by fires as needed, guided by the fire specific rehabilitation plan provided by the Field Office to the suppression agency.

ROP FM-1h Helicopters used for any activity during snow free conditions, which requires landing in wildland fuels, should have the exhaust/cooling system located high on the fuselage. Helicopters, which have exhaust/cooling systems that are located low on the fuselage and expels the exhaust straight back or downward, should only be landed in areas with no fuel such as areas of bare soil, gravel bars, or other areas of low combustability.

10. Forestry

a) Objective Forest-1

Forest resources will be managed to ensure biodiversity, long-term productivity, and a wide spectrum of multiple uses, including scenic values, recreation, fish and wildlife habitat, watershed protection, and where feasible, harvest of forest products.

Required Operating Procedures

ROP Forest-1a Timber sales will rely to the extent possible, on natural regeneration through proper site preparation.

ROP Forest-1b Timber sales will include buffers to prevent disturbance of fish habitat and possible sedimentation into streams. Buffer widths will be dependant on harvest method, season of harvest, equipment used, slope, vegetation, and soil type. Winter operations will be encouraged in order to minimize impacts to riparian areas.

11. Mineral Materials

a) Objective Mineral Materials-1

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

Required Operating Procedures

ROP MM-1a When responding to a request for a material sale or identifying a source for materials on public lands, the highest priority will be given to using existing upland material sources that meet suitability and economic needs. Using material from wetlands, lakes, and active or inactive floodplains will be avoided unless no feasible public upland alternative exists. Sales or permits for in-stream gravel extraction will not be permitted in known fish spawning reaches of the active river or stream channel.

ROP MM-1b Avoid habitats critical to local fish or wildlife populations (i.e. Fish spawning and over wintering, calving areas, raptor nesting sites).

ROP MM-1c Avoid key geomorphic features such as the beach barrier dune, river cut banks and associated riparian zones, root zones of spits, tombolos and barrier islands, springs, active channels of small, single channel rivers, and wetlands.

ROP MM-1d When possible, avoid vegetated habitats. If mining in vegetated areas, all overburden, vegetative slash, and debris will be saved for use during site reclamation to facilitate vegetative recovery. This material will be piled or broadcast so that it will not be washed away.

ROP MM-1e When scraping gravel in active or inactive floodplains, maintain buffers that will constrain active channels to their original locations and configurations.

b) Objective Mineral Materials-2

Consider the technical character of the preferred site and available alternate site(s).

ROP MM-2a The site can provide mineral material meeting the technical and volumetric requirements of the project and still maintain space for any required buffers.

ROP MM-2b Amount of site preparation and rehabilitation required will be considered to minimize the following: haul distance, vegetation and overburden removal, river training structures bank and other erosion protection devices, length of access route, crossing of active drainage or channels and wet working conditions in the pit.

12. Mining Law Administration

BLM is to manage public lands consistent with the intent of the mining laws, primarily the Mining Law of 1872 as amended, and the Federal Land Policy and Management Act of 1976.

a) Objective Mining Law Administration-1

Prevent unnecessary or undue degradation of the environment and its natural resources from mining operations and prevent unauthorized occupancy on mining claims. To accomplish this, BLM relies on its authorities under 43 CFR 3809 (Surface Management) and 43 CFR 3715 (Use and Occupancy under the Mining Laws). Consistent with the intent of these regulations, the following Required Operating Procedures provide additional guidance on the management of activities related to mining on BLM administered public lands.

Required Operating Procedures

ROP MLA-1a Existing access routes will be used where possible. Alternatives to and/or upgrading of existing access will be planned in consultation with the AO.

ROP MLA-1b All tailings, dumps, mining improvements, deleterious materials and substances, solid waste including scrap steel derelict mining machinery and parts will be disposed of to prevent unnecessary or undue degradation in accordance with applicable Federal and State Laws and in consultation with the AO.

ROP MLA-1c Hazardous substances used for exploration or mining will be contained and backhauled for disposal at a proper facility for that material. Used petroleum products may be converted onsite or contained and backhauled for proper disposal. The storage of fuels and petroleum products will be in a location approved by the AO in accordance with permit requirements of the State of Alaska Department of Environmental Conservation.

ROP MLA-1d Sanitation efforts including the disposal of gray water and kitchen wastes will be approved by the AO in accordance with the State of Alaska Department of Environmental Conservation General Mine Permit or plan specifically developed in consultation with that Agency.

ROP MLA-1e Water quality of both surface and underground waters will be regulated by terms and conditions of The U.S. Environmental Protection Agency's National Pollution Discharge Elimination Permit (NPDES). Note that in the future, implementation of the NPDES program regulating water quality of both surface and ground waters may

be regulated by 18 AAC, Chapter 70 (Alaska Water Quality Standards) and 18 AAC, Chapter 83 for surface waters.

13. Hazardous Materials and Waste Management

a) Objective Hazardous Materials and Waste Management-1

Protect the health and safety of permittees, lessees, and the general public by avoiding the disposal of solid waste and garbage near areas of human activity.

Required Operating Procedures

ROP Hazmat-1a Areas of operation will be left clean of all debris.

b) Objective Hazardous Materials and Waste Management-2

Minimize impacts on the environment from non-hazardous waste generation.

Required Operating Procedures

ROP Hazmat-2a All feasible precautions will be taken to avoid attracting wildlife to food and garbage.

ROP Hazmat-2b Current requirements prohibit the burial of garbage. All putrescible waste will be incinerated, backhauled, or composted in a manner approved by the AO. All unburnable solid waste will be backhauled and disposed of in an approved waste-disposal facility in accordance with U.S. Environmental Protection Agency (EPA) and Alaska Department of Environmental Conservation (ADEC) regulations and procedures.

ROP Hazmat-2c No disposal of domestic wastewater is allowed into bodies of fresh, estuarine, and marine water, including wetlands, unless authorized by the National Pollution Discharge Elimination System (NPDES) or State permit.

ROP Hazmat-2d Wastewater must be managed in accordance with Title 18 Alaska Administrative Code, Chapter 72, (18 AAC 72) Wastewater Disposal. Wastewater is defined as Human Waste (sewage), and Gray Water (water which has been used for personal hygiene, washing clothing or equipment, or sanitizing cooking and eating materials). If the standards for Pit Privies found at 18 AAC 72.030 cannot be met, all wastewater must be collected and transported to a state approved disposal facility. Upon closure of the campsite the Pit Privy must be completely back-filled with the surface area covered and re-graded to approximate original appearance.

ROP Hazmat-2e Pit privies will be located a minimum of at least 100 feet from the high-water mark of streams, rivers, or lakes. Pit privies will be sprinkled with lime and

then backfilled with a minimum of two feet of over-material when the pit has reached capacity or the operation is terminated. All Pit privies must comply with ADEC Standards.

ROP Hazmat-2f For oil and gas operations, all pumpable solid, liquid, and sludge waste will be disposed by injection in accordance with EPA, ADEC, and the Alaska Oil and Gas Conservation Commission regulations and procedures. The AO may permit alternate disposal if the lessee demonstrates that subsurface disposal is not feasible or prudent and the alternative method will not result in adverse environmental effects.

ROP Hazmat-2g For oil and gas operations, produced water will be disposed of into injection wells as approved by the Alaska Oil and Gas Conservation Commission (AOGCC) under EPA regulations and the Underground Injection Control (UIC) program. The AO may permit alternate disposal methods if the lessee demonstrates that subsurface disposal is not feasible or prudent and the alternative method will not result in adverse environmental effects.

c) Objective Hazardous Materials and Waste Management-3

Minimize the impacts to fish, wildlife, and the environment, from hazardous materials, oil spills, and other chemical spills.

Required Operating Procedures

ROP Hazmat-3a For oil and gas operations and mining Plans of Operation, a Hazardous Materials Emergency Contingency Plan will be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan will 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. The plan will 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 and State contacts.

ROP Hazmat-3b The applicant will provide BLM a disclosure of the components in any hydraulic fracturing materials to be used, the volume and depths at which such materials are expected to be used, and the volume capacity of the vessels to be used to store such materials.

ROP Hazmat-3c For oil and gas operations and mining Plans of Operation, the operator will maintain Material Safety Data Sheet (MSDS) information on all hazardous substances used by the operator.

ROP Hazmat-3d Before initiating any oil and gas or related activity or operation, including field research/surveys and/or seismic operations, lessees/permittees will develop a comprehensive spill prevention and response contingency plan per 40 CFR 112 .

ROP Hazmat-3e For oil and gas operations, mining operations, and other leases and permits, sufficient oil-spill cleanup materials (absorbents, containment devices, etc.) will

be stored at all fueling points and vehicle-maintenance areas and will be carried by field crews on all overland moves, seismic work trains, and similar overland moves by heavy equipment.

ROP Hazmat-3f Fuel and other petroleum products will be stored at a location approved by the AO and within an impermeable lined and diked area capable of containing 110 percent of the stored volume or within approved alternate storage containers.

ROP Hazmat-3g Fuel storage will not occur closer than 100 feet from any river, lake, stream, or wetland unless approved by the AO.

ROP Hazmat-3h Liner material will be compatible with the stored product and capable of remaining impermeable during typical weather extremes expected throughout the storage period.

ROP Hazmat-3i Fuel and other petroleum products and hazardous materials will be stored in containers designed to hold that product. All fuel containers, including barrels and propane tanks, shall be marked with the responsible party's name, product type, and year filled and purchased.

ROP Hazmat-3j Hazardous materials/toxic substances, as defined by EPA (i.e., used oils/petroleum products, batteries), will be handled and disposed of in accordance with EPA and ADEC guidelines.

ROP Hazmat-3k All fuel spills will be cleaned up immediately, taking precedence over all other matters, except the health and safety of personnel. Spills will be cleaned up utilizing absorbent pads or other ADEC approved methods.

ROP Hazmat-3l Notice of any reportable spill (as required by 40 CFR 300.125 and 18 AAC 75.300) will be given to the AO as soon as possible, but no later than 24 hours after occurrence and such other Federal and State officials as are required by law to be given such notice including ADEC at (907) 478-9300.

ROP Hazmat-3m Surface discharge of reserve-pit fluids and produced water is prohibited unless authorized by applicable NPDES, ADEC, and Borough permits and is approved by the AO.