Appendix A: Comments and Responses

Comments submitted in response to:

- Proposed Copper River Basin Oil and Gas exploration License, Preliminary Finding of the Director, January 19, 2000.

State Agencies

Alaska Department of Fish And Game, L. Trasky, 3/9/2000	
Page 3-6. Table 3.3. Aerial Survey Indices of Chinook Salmon Escapement to the Upper Copper River. 1987-1997: This table includes an "average" column for the years 1987-1997. However, the data ADF&G provided in our March 11, 1999 memorandum to the Department of natural Resources (DNR) identified average chinook salmon escapements from 1985-94, which we believe are more representative long term averages. consequently, ADF&G recommends that this table be revised to include the 1985-94 averages.	The 10-year average presented in the table provided by ADF&G did not match the data presented in the rest of the table. In the absence of an explanation for using that average, the table was confusing. We understand that the 10-year escapement average presented is considered by ADF&G to be more representative of the average returns to Upper Copper River. To better represent the average presented in the table we are adding count data from years 1985 and 1986, adding a footnote regarding the reason ADF&G chose escapement data for years 1985 through 1994, and changing the average to represent years 1985 through 1994.
Page 3-7. Table 3.4. Aerial Survey Indices of Sockeye Salmon Escapement to the Upper Copper River. 1987-1997: We recommend that this table be revised to identify the 1983-92 10-year averages that were previously provided to DNR (see comment 6).	The 10-year average presented in the table ADF&G provided did not match the data presented in the rest of the table. In the absence of an explanation for using that average, the table was confusing. We understand that the 10-year escapement average presented is considered by ADF&G to be most representative of the average returns to Upper Copper River. To better represent the average presented in the table we are adding count data from years 1983 through 1986, adding a footnote regarding the reason ADF&G chose only escapement data for years 1983 through 1992 to average, and changing the average column to represent years1983 through 1992.
Page 3-8. Figure 3.1. Important Anadromous Fish, Bear, and Bison Habitat: This map depicts a large brown bear intensive use area along the Copper River, from Gulkana extending south to Dadina River. We would note that this area was identified as suspected brown bear denning (Alaska Wildlife and	Figure 3.1 was drawn from habitat maps presented in the Alaska Regional Profiles by Selkregg, 1975 that in turn references Alaska Wildlife and Habitat, 1973 (AWH). We agree that areas listed as suspected denning areas should be removed from Figure 3.1.

habitat, ADF&G 1973), and would not necessarily be considered an intensive use area.	Figure 3.1. The shaded area along the Copper River from Gulkana extending south to Dadina River was removed.
In addition, ADF&G recommends that this figure be revised to include brown bear feeding concentrations along: a) Mendeltna Creek, b) Kiana Creek, and c) Dog Creek, which flows from Crosswind Lake down to the Gulkana River (Pers. Comm. J. Westlund, ADF&G, Division of Wildlife Conservation with Mark Fink, ADF&G, H&R, March 2000).	Figure 3.1 was revised to include brown bear intensive use areas along Mendeltna Creek, Kiana Creek, and Dog Creek. Reference added to end of Chapter 3.
Page 3-23. C. References: The personal communication regarding trumpeter swans attributed to J. Westlund was actually between Westlund and Mark Fink.	Chapter 3 page 3-23 References, under Westlund J. Citation was corrected.
Chapter 4: Current and Projected Uses of the Proposed Licensed Area. Page 4-2. B. Subsistence Hunting, Fishing, and Trapping: This section states that the federal government manages subsistence resources on federal lands. This statement incorrectly describes the management of fish and wildlife resources and harvest allocation.	This section was corrected.
Alaska State Legislature, Rep. J. Harris, 3/20/2000	
In Chapter 8, Conclusion and Request for Comments, on page 8-1, a reference is made under the heading "Fiscal Effects" regarding the financial assistance received by Copper River basin communities from the State of Alaska. One form of assistance listed is "power cost equalization." This is incorrect. Copper River basin communities are served by the Copper River Electric Association and do not receive PCE. If you will correct this statement in your final best interest finding, I would appreciate it.	Chapter 8, page 1, Section A.1. Fiscal Effects. "power cost equalization," was removed.

Industry

Anschutz Exploration Corporation, G. Young, 3/15/2000	
The Exploration License ("License") will not be awarded until August 26, 2000 which will effectively eliminate the 2000 season for fieldwork. This should be reflected in the term of the License, or the License should be effective as of April 1, 2001 to allow the	Exploration licenses will be awarded to reflect the ability to conduct full seasons.

maximum time for work during its term.	
Chapter 1, Page 7, Figure 1.1 - State Lands in Townships 3, 4 and 5 North, Range I West, east of the Copper River have been excluded from the study area isolating those tracts.	These tracts have been excluded because they are in the Wrangell-St. Elias National Park and Preserve.
Chapter 1, Page 11, b., first paragraph, last line - Gravity and magnetics surveys should be exempt from the $ 100,000 bond requirement for a Geophysical Exploration Permit.	A geophysical exploration permit and bond is required for seismic surveys. Gravity and magnetic operations on state lands require only a land use permit unless the nature of the work suggests that damage could result as a consequence of the proposed activity (i.e. fuel storage).
Chapter 1, Page 18, third full paragraph - Is the requirement for a wellsite seismic survey a North Slope or a Statewide requirement and can it be satisfied by drilling on a normal 2D seismic shot point?	The requirement for well site surveys is a statewide requirement. See 20 AAC 25.061. It applies to exploratory, stratigraphic test wells and wells drilled offshore. The seismic evaluation must be done by "common depth point reflection or reflection point analysis" or by another method approved by AOGCC that identifies anomalous velocity variations indicative of potential shallow gas. The commission can waive those requirements if the operator can identify, by other equally effective means, the likelihood of encountering potential shallow gas.
Chapter 5, page 4, last paragraph: There is no Figure 5.5.	This has been corrected in the final finding.
Chapter 5, Page 13, 2. Exploration Drilling, third paragraph. Is the requirement for a diked and lined gravel pad for fuel storage necessary in this specific area and if so, what is the threshold for triggering this requirement?	Lining and diking, in general, is addressed at Mitigation Measure 8. Depending upon the location of proposed activity (within a floodplain, for example), other site-specific measures may be included at the permitting stage.
Chapter 5, Page 16 - Habitat Loss - Due to prohibition of heavy equipment in riparian habitat, an exhibit identifying riparian habitat should be included.	Riparian habitat will be identified through the permitting process when site-specific activities are proposed.
Chapter 5, Page 16, paragraph 4 - Active flood plains where gravel mining will be prohibited should be fully identified.	Active flood plains will be identified through the permitting process when site-specific activities are proposed.
Chapter 5, Page 18, first full paragraph, last line - Peregrine Falcon nest sites should be redefined as "active" nest sites that have been occupied once during the last two nesting	Peregrine falcon nests are used repeatedly, so it is the state's responsibility to protect all nesting sites. It should be noted, however, that presently peregrine falcon nesting sites are not

seasons	known to occur in the license area.
Chapter 5, Page 21, f. Bears - Light activities, such as summer field geologic work and/or summer-winter gravity and magnetics surveys, should be exempt from the planning and mitigation measures of this paragraph as dens should not be disturbed by these types of activities.	Mitigation Measure 22 "encourages" a licensee to take certain steps to avoid human-bear interaction. Mitigation Measure 23 is more specific and places an addition burden on ADF&G. Licensees should understand that, as a result of past experience, mitigation measures have been included to protect bears and humans from undesirable results.
Chapter 6, Page 3, second full paragraph (see 4 above) - Can this requirement be satisfied by drilling on a seismic shot point or is a specific seismic survey required and if so, where is it defined?	This paragraph simply describes standard industry practice. The state has no such requirement. The last sentence in the paragraph is being deleted.
Chapter 6, Page 7, fifth line of second paragraph - Correct typo. 2.500 should be 2,500.	This has been corrected.
Chapter 7, Page 2 - Field geologic work should be exempt from proposed mitigation measures of Chapter 7.	Geologic field work (gravity surveys, sample-gathering, etc.), requires only a land use permit where any required conditions and stipulations will be imposed.
Chapter 7, Page 3 - Charge depth should also be related to charge size and incorporated into the table.	This chart reflects the most conservative estimates of charge weights and distances from streams. More specific information on offsets considering substrate type and depth of charge will be available at the permitting stage.
Chapter 7, Page 3, paragraph 3 - Consider addition of paragraph 3.d providing that existing trails can be used for exploration activities as long as it is consistent with the usual and customary types of vehicles (i.e.,ATVs/snow machines) used on said trail.	Depending upon the area, ATVs could be specifically excluded. The time to address this issue is at the permitting stage. ATVs may then be included as necessary.
Chapter 7, Page 4, paragraph 7 - Key wetlands and sensitive habitat should be identified to the extent possible before the final bid is formulated because of their potential impact on operational logistics and costs.	Key wetlands and sensitive habitat areas are identified at the permitting stage when time-certain and site-specific activities are proposed. It is too costly to identify these areas on an area-wide basis when the likelihood of actual siting is remote. It should be noted that facilities may be in these areas when appropriate mitigation measures are included.
Chapter-7, Page 5, paragraph 12A. -It is. requested that the public be restricted from access 1500 feet on either side of a seismic line during times of data acquisition.	Restricting public access from close proximity to seismic operation is a reasonable request and can be included as necessary when a Geophysical Exploration Permit is issued.
Chapter 7, Page 6, paragraph 15. - Add a provision allowing Licensee to use ATVs and snow machines within riparian habitat consistent with usual and customary use,	See comment on ATVs above.

including existing trails.	
Chapter 7, Page 7 - Paragraph 16 should have an asterisk (*) and ADNR, DO&G and any other agency with the authority to grant exceptions to solid waste disposal proposals should be listed. There is a significant variation on what is "technically feasible" and/or appropriate for remote exploratory wells, development wells and the specific geography of each project which requires acknowledgment of the need for flexibility and case-by-case mitigation.	This is under the authority of the Alaska Department of Conservation. Other agencies do not have the authority to grant exceptions to DEC's regulations.
Chapter 7, Page 8, SPECIAL AREAS. This is a defined term requiring a Special Area Permit (1-17) and is therefor a misnomer for this section of mitigations and notice requirements	The comment is noted, and the heading will be changed to "Areas of Special Interest".
B-2, paragraph 2.(5) - Add the following phrase to the last line after "land": ", after abandonment by operator of the wellsites and well bores	DO&G wants full access to operations to observe. This is the intent of 2.(5).
B-2, paragraph 6. - End of line two insert the words "copies of" between the words "...department all..."	The comment is noted and the phrase can be changed to read " . . . shall submit to the department <u>copies of</u> all geologic and . . .".
B-3, paragraph 7.(b) - Last line, insert the phrase ", less all qualifying work commitment expenditures," between the words "...bond shall..."	DO&G agrees that field expenditures should be credited.
B-4, paragraph 10 - Clarification is needed. Is it the intent of this paragraph to pay damages according to a predetermined schedule, i.e. 2D seismic lines @ $X per mile? Please provide additional guidance.	In the past, experience indicates that with few exceptions a lessee (licensee) and a surface-owner have been able to come to terms without invoking the provisions provided for by regulation. In a very few instances, the state has been required set a bond amount, which then must be posted by a lessee (licensee), before commencement of operations. "Damages" remains undefined", however. A bond "to secure the owner for damages" has never been called by a landowner.
B-4, paragraph 11 - Add the following as the next to last sentence in the paragraph: "All such inspections shall be conducted at the sole cost, risk and expense of the State of Alaska."	The comment is noted and a sentence can be added: ". . . with regard to the licensed area or under this license. <u>All such inspections shall be conducted at the sole cost, risk, and expense of the State of Alaska; provided, however, *[add some language about licensee's negligence]*</u>. Upon request, the licensee . . .".
There should be provisions for force majeure in the License Agreement as there are in the Lease.	The comment about adding a force majeure clause is noted. *[The request is not unreasonable, but presents some cumbersome*

	problems because of the performance bond language. Maybe DOL can help - if Ken agrees to the request.
Change title since this lease would not be issued through the competitive leasing procedures.	Changing the title of the lease creates an in-house paper problem and is not necessary. The lease was, in fact, obtained by competitive means through the competitive licensing process.
C-6, paragraph 16 - Add the following sentence as the next to last sentence in said paragraph: "All such inspections shall be conducted at the sole cost, risk and expense of the State of Alaska."	See comment on B-4, Paragraph 11, above.

Others

Ahtna Inc., H. Heinze, 3/20/2000	
Creating Trespass: The creation of any open path through wooded public lands potentially opens access to adjacent Ahtna lands for unauthorized hunting (i.e., TAPS right-of-way) and regulators have been ineffective in mitigating this damage. Ahtna expects that any access created in the exploration process will be analyzed for its potential to facilitate future trespass on adjacent private land and steps taken at the conclusion of exploration use to mitigate future damage.	Reducing impacts due to increased access associated with oil and gas development is of primary importance during the planning for an exploratory license. Mitigation requirements, incorporated into the Final Finding, have been designed to minimize any potential access issues. Examples of mitigation designed to limit access include forbidding the construction of permanent roads during the exploration phase, requiring community participation that allow residents to provide critical input and traditional knowledge in operations and siting of facilities and access points, and utilizing temporary ice roads during the winter months for exploration and development. For further information regarding access and mitigation see Chapters Five and Seven.
Unorganized Borough: The vast majority of the license application area and the impacted local communities are in the “unorganized borough”, not the Mat-Su Borough. The State collects the local taxes and stands in the place of local government as the service provider in the unorganized borough. There is no documentation in the report to contradict the local impression that State funding does not recognize the significant negative impacts that projects for the "general good” of the State have on the local people and communities. The final finding should note the unusual “no local government” status of the area and advise that a major oil and gas development may lead to	Chapter Five discusses the effects of oil and gas licensing and other subsequent activities on local governments and unincorporated communities. Included in this chapter is a description of the differences in benefits to the Mat-Su Borough and residents of the unorganized portion of the study area. The primary difference being that the Mat-Su Borough has the right to levy taxes, participate in state revenue sharing, and other transfer programs. If a significant discovery of oil and gas is found, residents of an unincorporated area could form a borough to benefit from potential property tax revenues and state revenue sharing programs. Private property

new mechanisms for achieving equitable impacts and benefits locally.	owners in unincorporated areas could directly benefit from royalties related to oil and gas production should it be necessary to drill on or otherwise access private land. Local communities will directly benefit from increased employment, use of produced resources to offset energy needs, and indirect income multiplier effects. Residents in the unincorporated portion of the licensing area maintain significant tax and state service advantages over the Mat-Su Borough. The state provides funding for such services as schools, roads, and hospitals that would otherwise be funded primarily through taxes in incorporated communities.
Contractors exist in the Copper River area that can provide the full range of services required in support of any exploration activity. The final finding should direct the licensee to report the utilization of any contractor that is not already operating in the Copper River region and credit towards an exploration commitment denied if that service is available in the region.	Local hire requirements are discussed in Chapter Seven of the preliminary finding. To the extent they are available and qualified, the licensee is encouraged to employ local and Alaska residents and contractors for work performed in the license area. Licensees are required to submit as part of their operations plan a proposal to include plans for partnering with local communities to recruit and hire local and Alaska residents and contractors. Licensees are required to obtain approval of their operations plan from the director of oil and gas before conducting exploratory or development activities.
There is a very close bond of the people in the region to the land, water, fish, and animals. All activities should be conditioned on respect for these resources.	Respect for the region's land, water, fish and animals is a very important component in the licensing process. Licensees are required as part of their operations plan to include a training program for all personnel, including contractors and subcontractors, involved in any activity. The training program must be designed to inform each person working on the project of environmental, social, and cultural concerns that relate to the individual's job. The program must be designed to increase worker's sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.
Chugach Alaska Corp., Rick Rogers 3/1/2000	
CAC supports the proposed license and is pleased the state is moving forward in exploring this important region.	Comment noted.
We propose you consider expanding the lease area southward to include lands adjacent to CAC. We are willing to negotiate exploration	The area adjacent to CAC lands is outside the Copper River basin and has very low petroleum potential. No prospective licensees

and development of our holdings offering further incentive to prospective bidders.	have expressed an interest in this area.
Copper River Valley Electric Association, Robert Wilkenson 3/20/2000	
Supports the proposed license. Only one community within the study area receives power cost equalization. There exists a tremendous potential to significantly lower the region's electrical rates.	Comment noted.
Cordova District Fishermen United, Sue Aspelund, 3/16/2000	
Having experienced first hand the horrible impacts of the *Exxon Valdez*, our fishermen and community are all to familiar with what happens to fish and game resources as a result of an oil spill	Spills on land are much smaller and easier to contain and cleanup as compared to a tanker spill like the *Exxon Valdez*. The stationary nature of onshore exploration and production facilities and the predictability of maximum spill rates simplifies the development and implementation of oil spill contingency plans for those facilities. Even TAPS, with the tremendous quantities of oil flowing through that system, is designed to quickly shut down in the event of a rapid decrease in pressure such as would happen if there was a major break in the line. This safety feature, and many others, such as daily visual monitoring and block valves along the entire pipeline, limit the volume of a spill. In contrast, the locations of tanker accidents are unpredictable and can result in millions of gallons of oil being discharged in a matter of hours.
While strong oil spill response has been developed for marine waters, no contingency plans have been developed for other sensitive waterways along TAPS. This license would allow exploration along a significant length of the Copper River and we are unable to support it.	Licensees are advised they must prepare contingency plans addressing the prevention, detection and cleanup of oil spills. The siting of facilities other than roads docks and pipeline crossings is prohibited within 500 feet of all fishbearing streams and lakes and within one-half mile of the banks of the Copper, Gulkana, Klutina, Tonsina, and Tazlina Rivers and Mendeltna Creek, Lake Louise, Susitna, Crosswind and Ewan Lakes.
Kenny Lake Farm Bureau, John Devens, 3/20/2000	
The Kenny lake Farm Bureau supports the Copper River Oil and Gas Exploration license.	Comment noted.
Kenny Lake Soil and Water Conservation District, John Wenger, 3/20/2000	
The Kenny Soil and Water Conservation District supports the Copper River Oil and Gas Exploration license. The possible prospects of finding oil and gas would be very beneficial to	Comment noted.

our valley's economy.	
Metzger, Scott, 3/6/200	
It is not in the best interest of the subsistence dipnetters of the Chitna/Upper Copper River Region. Their lifestyle is put at risk.	Reducing or eliminating the potential impacts to subsistence resources in the Copper River basin is of primary importance in issuing an exploratory license. For this reason, several mitigation measures have been developed in coordination with the Alaska Department of Fish and Game, the United States Fish and Wildlife Service, and other state and local agencies to protect fish and wildlife resources. Mitigation measures listed in the finding include but are not limited to seasonal exploration restrictions, unrestricted access to subsistence use areas, public outreach, construction setback distances from water bodies, seismic restrictions and directional drilling. No adverse impact to subsistence dip net activities is expected to occur from oil and gas development within the licensing area. For more information on subsistence and mitigation measures see Chapters Five and Seven.
It is not in the best interest of the state because, as I understand, the lessee only has to pay the state a few dollars per acre for the rights to drill for oil and desecrate the environment.	License fees are kept small ($/acre) in order to encourage exploration in the more remote areas of the state far removed from existing oil and gas infrastructure. The majority of the state's revenue is derived from royalties, production taxes, income taxes, and oil and gas property taxes, which could result from an exploration license. Benefits to the local region and the state include revenue sharing, creation of new jobs and indirect multiplier effects (Chapter Five A. Fiscal Effects). It is the State's position that resources can be developed effectively without compromising the environment. Every effort has been made to reduce the footprint resulting from oil and gas exploration through a series of mitigation requirements developed in cooperation with the State Department of Fish and Game, the United States Fish and Wildlife Service, and other state and local agencies. These requirements have been integrated into the preliminary finding and are discussed in Chapter Seven.

It is not in the best interest of the residents of that region who live and hunt in the proposed exploration area. It is not in the best interest of the wildlife who will be forcefully displaced.	Mitigation measures have been developed to ensure disturbance impacts to wildlife do not occur during oil exploration or development activities. These mitigation measures include, but are not limited to, seasonal exploration restrictions to avoid wildlife disturbance, unrestricted access to subsistence use areas, construction setback distances from water bodies, and seismic restrictions. These mitigation measures and licensee advisories have been determined sufficient by state and federal resource agencies to protect subsistence resources within the licensing area. Wildlife is not expected to be adversely affected due to oil and gas exploration in the licensing area.
It is not in the best interest in the state of Alaska to put the Copper River, a prime fish resource and recreational jewel, at any further risk from oil exploration.	We agree that the Copper River is a prime fish resource and recreation area. Extensive mitigation and planning requirements have been developed to ensure that the Copper River and other important resources within the licensing area are not adversely impacted due to oil and gas exploration. These measures include set back distances, etc.