DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 216

[Docket No. 970725179–8017–03; I.D. 071497A]

RIN 0648–AK33

Taking and Importing Marine Mammals; Taking of Ringed Seals Incidental to On-Ice Seismic Activities

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS, upon application from BP Exploration (Alaska) (BPXA) on behalf of itself and several other oil exploration companies, issues regulations to govern the unintentional take of a small number of seals incidental to winter seismic operations in the Beaufort Sea, AK. Issuance of regulations governing unintentional incidental takes in connection with particular activities is required by the Marine Mammal Protection Act (MMPA) when the Secretary of Commerce (Secretary), after notice and opportunity for comment, finds, as here, that such takes will have a negligible impact on the species and stocks of marine mammals and will not have an unmitigable adverse impact on the availability of them for subsistence uses. These regulations do not authorize the industry's proposed activity, such authorization is under the jurisdiction of the U.S. Department of the Interior and is not within the jurisdiction of the Secretary. Rather, these regulations authorize the unintentional incidental take of marine mammals in connection with such activities and prescribe methods of taking and other means of effecting the least practicable adverse impact on the species and its habitat, and on the availability of the species for subsistence uses.

DATES: Effective February 2, 1998 until December 31, 2002.

ADDRESSES: A copy of the application and Environmental Assessment (EA) may be obtained by writing to Michael Payne, Chief, Marine Mammal Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910–3226, or by telephoning one of the persons below (see **FOR FURTHER INFORMATION CONTACT**).

Comments regarding the burden-hour estimate or any other aspect of the collection of information requirement contained in this rule should be sent to the above individual and to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attention: NOAA Desk Officer, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Kenneth R. Hollingshead (301) 713–2055 or Brad Smith, Western Alaska Field Office, NMFS, (907) 271–5006.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1361 *et seq*.) directs NMFS to allow, upon request, the incidental, but not intentional, taking of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and regulations are issued.

Permission may be granted for periods of 5 years or less if NMFS finds that the taking will have a negligible impact on the species or stock(s) of marine mammals and will not have an unmitigable adverse impact on the availability of these species for subsistence uses and that regulations are prescribed setting forth the permissible methods of taking and the requirements pertaining to the monitoring and reporting of such taking. Specific regulations governing the taking of ringed seals incidental to on-ice seismic activity, which were published on January 13, 1993 (58 FR 4091), expired on December 31, 1997.

Summary of Request

On July 11, 1997, NMFS received an application for an incidental, small take exemption under section 101(a)(5)(A) of the MMPA from BPXA, on behalf of itself, ARCO Alaska, Inc., Northern Geophysical of America, Inc., and Western Geophysical Co. to renew the incidental take regulations found in 50 CFR part 216, subpart J (previously 50 CFR part 228 subpart B), to govern the taking of ringed seals (*Phoca hispida*) and bearded seals (*Erignathus barbatus*) incidental to seismic activities on the ice, offshore Alaska, for a period of 5 years. The applicants state that these activities are not likely to result in physical injuries to, and/or death of, any individual seals. Because seals are expected to avoid the immediate area around seismic operations, they are not expected to be subject to potential hearing damage from exposure to underwater or in-air sounds from the operations. Any takings of ringed seals are anticipated to result from short-term disturbance by noise and physical activity associated with the seismic operations.

The scope of the petition is limited to pre-lease and post-lease seismic exploration activities in state waters and in the Outer Continental Shelf in the Beaufort Sea, offshore Alaska, during the ice-covered seasons. Because a minimum of 3 to 4 ft (.9–1.2 m) of ice is required to safely support the weight of equipment, on-ice seismic operations are usually confined to the 5-month period between January through May. These seismic surveys will be conducted using two types of energy sources: (1) Vibroseis, which uses large trucks with vibrators mounted on them, that systematically put variable frequency energy into the earth and (2) waterguns or airguns carried by a sleigh or other vehicle. The vibroseis method is much more common. Over the next 5-year period, the applicants expect that on-ice seismic activity will cover approximately 22,500 line miles (mi)(3,610 kilometers (km)) or 4,500 line mi/yr (7,242 km/yr). This compares to 13,247 line mi (21,319 km) in the aggregate or 1,305 to 4,903 line mi/yr (2,100 to 7,891 km/yr) during the past 5-year period.

These regulations apply only to the incidental taking of ringed and bearded seals by U.S. citizens engaged in seismic activities on the ice and associated activities in the Beaufort Sea from the shore outward to 45 mi (72 km) and from Point Barrow east to Demarcation Point during January 1 through May 31 of any calendar year through December 31, 2002. However, because bearded seals are normally found in broken ice that is unsuitable for on-ice seismic operations, few, if any, bearded seals will be impacted, and mainly ringed seals are expected to be taken incidental to the seismic surveys.

The incidental, but not intentional, taking of ringed and bearded seals by U.S. citizens holding a Letter of Authorization (LOA) will be permitted during the following: (1) On-ice geophysical seismic activities using two types of energy sources (i.e., vibroseis or waterguns or airguns), and (2) operation of transportation and camp facilities associated with seismic activities. Oil drilling activities will not be covered under this regulation; such activities will need a separate authorization under either section 101(a)(5)(A) or 101(a)(5)(D) of the MMPA.

Comments and Responses

On October 27, 1997 (62 FR 55564), NMFS published a notice of proposed rulemaking on the application and invited interested persons to submit comments, information, and suggestions concerning the application and the structure and content of regulations.

During the 30-day comment period, NMFS received letters from the Marine Mammal Commission (MMC), Greenpeace (on behalf of itself, the Alaska Wilderness League and the Northern Alaska Environmental Center), the Sierra Club (Georgia Chapter) and 1 individual commenting on the proposed rule. Comments contained in these letters are addressed below. Comments regarding issues other than the issuance of regulations and authorizations for the incidental harassment of ringed and bearded seals by on-ice seismic work are beyond the scope of discussion here and are not addressed further. Information on the activity, the environmental impacts, and the authorization request that are not subject to reviewer comments can be found in the proposed rule notice and is not repeated here.

MMPA Concerns

Comment 1: Greenpeace believes that the applicants failed to address a Plan of Cooperation (POC).

Response: NMFS has stated previously that a formal POC may not be necessary for all activities that might result in the incidental harassment of marine mammal species that are also sought for subsistence purposes. In order for NMFS to determine that there will not be an unmitigable adverse impact on the availability of marine mammals for taking for subsistence purposes, the information items specified in 50 CFR 216.104(a)(12) will need to be provided. If neither a POC has been submitted, nor meetings with subsistence communities have been scheduled and if during the comment period evidence is provided indicating that an adverse impact to subsistence needs will result from the activity, an authorization may be delayed to resolve this disagreement. NMFS notes that the applicant responded to this information request in its application. Neither Greenpeace nor other commenters have provided information that an unmitigable adverse impact on subsistence harvests will occur. Greenpeace misinterprets the statute in stating that no proof exists that the activity will not have an impact on subsistence needs; the statute requires only that the activity will not have an unmitigable impact on subsistence needs. Copies of the application and notice of proposed authorization were forwarded to appropriate North Slope (AK) government agencies. These agencies have not indicated that there would be an unmitigable adverse impact on subsistence seal harvests. Finally, NMFS notes that POCs are not mandated by statute, but are required by regulations when necessary to facilitate the Agency's determination that an activity not have an unmitigable adverse impact on subsistence needs.

Comment 2: Greenpeace requests that the regulations not be issued until Traditional Knowledge for the 1992–1997 period be gathered, analyzed, and shown to support the claim that there will be no effect to subsistence hunting in the 5-year period beginning in 1998.

Response: NMFS would like to clarify that the statutory requirement is that the activity not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals intended for subsistence uses. ''Unmitigable adverse impact,'' as defined in 50 CFR 216.103, means an impact resulting from the specified activity: (1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by: (i) causing the marine mammals to abandon or avoid hunting areas; (ii) directly displacing subsistence users; or (iii) placing physical barriers between the marine mammals and the subsistence hunters; and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

As the applicant noted, ringed seals are today hunted principally on water with rifles, not at breathing holes in winter, and the numbers in recent years have been small (Barrow–394 ringed seals, 174 bearded seals; Kaktovik–70 ringed seals, 30 bearded seals; Nuiqsut–0 seals). Therefore, since no information was provided by commenters to the contrary (tables provided by the commenter were undated and unquantified), there is no need to delay the authorization process to collect this information. However, NMFS has added as a condition to obtaining a Letter of Authorization (LOA) a requirement for participants or their representatives to communicate each year with the native communities, prior to conducting on-ice activities, to ensure the availability of marine mammals for subsistence uses. NMFS will ensure that this communication has taken place and that any recommendations made by the villages of Barrow, Kaktovik or Nuiqsut have been addressed by a potential LOA holder, prior to issuance of an LOA.

Marine Mammal Concerns

Comment 3: Greenpeace believes that greater numbers of bearded seals will be taken than estimated because bearded seals inhabit the shore-fast ice.

Response: NMFS notes Greenpeace's statements from the quoted source (Lentfer (ed) 1988). However, using this same reference, NMFS notes that, as stated in the application, bearded seals avoid regions of continuous, thick, shorefast ice * * *and are not common in regions of unbroken, heavy, drifting ice (Burns 1981). Burns (1981) suggests that a requirement for leads, polynas, and other openings was an important determinant of distribution. Kelly (1988) notes that the proportion of bearded seals in shorefast ice though unknown, is probably small, and that most bearded seals apparently leave the Beaufort/Chukchi Seas in winter. As a result, NMFS believes that relatively few bearded seals are expected to be harassed by on-ice seismic activities. Because there is a potential for small numbers of bearded seals to be harassed incidental to on-ice seismic activities, a small take authorization is appropriate.

Comment 4: Because no reliable population size estimates are available, it is impossible for NMFS to determine that the take of bearded seals would pose a negligible impact.

Response: NMFS disagrees. A negligible impact is an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). Based on the information provided in Comment 3 above, and because there is no information to indicate that the take would be more than by incidental harassment, a negligible impact determination can be made. Since the short-term displacement of a relatively few animals will not affect the recruitment or survival of a stock numbering approximately 300,000, a negligible impact determination appears warranted.

Comment 5: One commenter questioned NMFS' statement that ''no significant overall difference was found in the rate of breathing hole abandonment along seismic and control lines.'' He noted that the study referenced in the earlier notice omitted that the supposed control lines were polluted by the construction of an artificial drill island (Seal Island) at the same location during the study (Burns and Kelly 1982). Thus, the intended control lines were also subjected to significant industrial activity. As noted, however, displacement was indicated by the higher incidence of abandonment within 150 m (492 ft) of seismic survey lines.

Response: While NMFS is puzzled why the researchers chose to establish the experiment in close proximity to an artificial island under construction in 1982, one must presume that any displacement due to construction had

taken place prior to the seismic experiment. However Kelly *et al.* (1988) noted this construction resulted in a radius of disturbance smaller than that caused by seismic noise.

While the data in Burns and Kelly (1982), Kelly *et al.* (1986) and Kelly *et al.* (1988) found no statistically significant difference between abandoned and altered structures within 150 m (492 ft) of seismic lines as compared with structures outside 150 m (492 ft), NMFS notes that, because of the small sample size, such distances should be used with caution when analyzing disturbance zones. For example, Kelly *et al.* (1986) noted that seals departed lairs in response to vibroseis and associated equipment at a distance up to 644 m (2,113 ft).

Comment 6: One commenter questioned how the applicant and NMFS determined that ringed seal displacement was 0.6 seals/nm^2, and how the estimated 4,500 linear miles of shot line was converted into 3,913 nm^2. Greenpeace questioned the accuracy of the estimate that 2,350 seals might be temporarily displaced and if so, whether that displacement included displacement of seals under water, or only on-ice.

Response: The statement on ringed seal displacement due to seismic work is from Burns *et al.* (1981). Based upon aerial surveys conducted in June 1975 through June 1977, comparisons were made of ringed seal densities between areas of seismic exploration and areas where no human on-ice activities occurred. Burns *et al.* (1981) found densities in the years 1975–1977 to be 1.21 seals/nm^2 in control area and 0.61 seals/nm^2 in seismic areas, yielding a displacement of 0.59 seals/nm^2 or, rounding, of 0.60 seals/nm^2. Because no new estimates of displacement have been made on data collected since that time, NMFS believes that estimate to continue to be the best scientific information available.

However, the applicant made an estimate for displacement independent of Burns *et al.* (1981). Using the highest recorded density of ringed seals between 1975 and 1987 (3.57 seals/nmi^2) and an assumed displacement of all ringed seals within 300 m (0.16 nmi) in a 1.0 nmi track, the applicant and NMFS believe that a worst case estimate of 0.57 seals/linear nmi of survey track can be made. If the observations in Kelly *et al.*'s (1986) that ringed seals leave lairs in response to vibroseis and associated equipment at a distance up to 644 m (2,113 ft) is valid, then one can expect approximately 2.5 seals/linear nmi of survey track could be displaced.

NMFS notes that 4,500 linear miles of shot line converts to 3,910.4 linear nmi, not 3,913 nmi^2. Multiplying 0.57 seals/linear nmi by 3,910 linear nmi equals 2,228, or close to the estimate of 2,346 seals made using 0.6 seals/nmi^2 from Burns *et al.* (1981). If seals are displaced up to 644 m (2,113 ft) from the seismic track, then 9,775 seals may be displaced annually (2.5 seals/ linear nmi by 3,910 linear nmi/year).

NMFS presumes that this displacement includes all ringed seals, whether in lairs or in the water. To the extent that presence in lairs reduces the tendency to flee, due to higher attenuation of noise in lairs (Bliz and Lentfer 1992), the number of seals harassed would be lower. However, since ringed seals spend a significant portion of their time in the water, NMFS presumes the number not fleeing would be minimal.

Comment 7: One commenter noted that surveys indicated that seal distribution, as noted by breathing holes and lairs, indicated a highly clumped distribution, rather than random distribution as stated in the notice.

Response: Although NMFS made the assumption of random distribution of ringed seals in order to make an assessment of takes by incidental harassment, NMFS used the highest observed density of ringed seals (3.57 seals/nmi^2) in order to compensate for clumped distribution. NMFS notes that overall average density during 1975 and 1987 has varied between 0.97 and 3.57 seals/nmi^2.

Comment 8: This same commenter noted that the distribution of seismic lines tends to be highly clumped, and the potential exists that an intensive grid of seismic lines would overlap with important pupping areas.

Response: While there may be some potential for seismic surveys to overlap with important pupping areas, surveys to date have not indicated an overlap. The majority of seismic exploration tends to be in shallow regions, inshore of the barrier islands, areas where birthing lairs are uncommon. Burns and Kelly (1982), for example, found birthing lairs represented only 7–9 percent of those ringed seal lairs located by trained dogs. Scientists hypothesize that ringed seal territoriality apparently plays a role in the location of birthing lairs. Therefore, NMFS believes that, to the extent that pre-survey monitoring could locate these regions, fewer pups would be displaced by on-ice seismic surveys.

Comment 9: Greenpeace interpreted the information provided in the application and cited from Burns and Kelly (1982) as noting that there was a higher rate of lair abandonment when there were human activities in combination with seismic activities near the lairs (32.7 percent), than when only seismic activities occurred (13.5 percent).

Response: While NMFS would agree with the statement's conclusion, NMFS notes that the increased lair abandonment from 13.5 percent due to seismic and a nearby oil exploration project to 32.7 percent occurred when activities were followed up by a monitoring program using dogs to relocate seals and lairs to determine rates of abandonment (see Kelly *et al.* 1988). Based upon this research, the rate of abandonment increased from 4.0 percent on shore-fast ice with no anthropogenic disturbance to 13.5 percent due to seismic and a nearby oil exploration project.

Comment 10: One commenter noted that, when seismic activities cause a ringed seal to abandon its lair, the abandonment is permanent, not temporary.

Response: NMFS has reviewed the scientific information and has determined that the abandonment can be either permanent or temporary. Kelly *et al.* (1988), based upon a study of radio-tagged ringed seals, noted that ''in all instances in which seals departed lairs in response to disturbance, they subsequently reoccupied the lair.'' However, as mentioned in the comment above, when researchers investigated breathing or access holes after seismic surveys, 13.5 percent of the holes were frozen, indicating permanent abandonment, an increase of 9.5 percent from normal abandonment (those with no significant anthropogenic disturbances).

Comment 11: Greenpeace expressed concern that the fate of ringed seal lairs and of the mothers and pups within them, when they are run over by seismic vehicles, has not been assessed by a scientifically credible monitoring/research program since these incidental take regulations were first issued.

Response: Greenpeace is correct; this type of survey has not been undertaken. However, NMFS has concerns over the value of such an undertaking when compared to other research. First, as discussed above, seals inside lairs are expected to vacate the lair prior to the vehicles reaching them. Burns and Kelly (1982) suggest that heavy equipment and human activity are the major source of disturbance, not the vibroseis noise itself. Therefore, impact of vibroseis equipment may, in effect, be no different than that of bulldozers or other heavy equipment constructing ice roads. As seals departed lairs in response to vibroseis and associated equipment at a distance up to 644 m (2,113 ft)(Kelly *et*

al. 1986), seals are not expected to remain in lairs that are within the direct track of vehicles.

In rare cases when seal lairs are damaged, seals unable to occupy them after the seismic vehicles have left, may leave. Based upon an estimated 3,910 linear nmi of shot line/year, an estimated road width of 10 ft (3 m), an estimated 2 lairs/seal and seal densities of 3.57 seals/nmi^2, an estimated 46 seal lairs might be damaged annually.

Comment 12: One commenter noted that (1), if a female abandons a pupping lair during the 6–8 week nursing period, it likely results in death of the pup and (2) displacing a yearling seal from its primary breathing hole means the seal will have to use holes maintained by older seals at which it will be especially vulnerable to attack. By increasing the time yearlings must spend defending themselves (as a consequence of displacement), the animal's chances of survival will likely further decrease.

Response: There are two identified means wherein disturbance could cause a loss of pups: (1) Abandonment of a lair by a female, leaving a dependent (unweaned) pup and not returning and (2) pup debilitation due to entering the water.

The best scientific information available at this time does not indicate that females will abandon a living pup. Instinct apparently affords some protection to young. For example, females have been observed moving newborn pups from one lair to another (Smith 1987), and it is reported that Inuit and polar bears utilize this maternal instinct in order to kill females returning to protect a pup (Smith 1986, Smith *et al.* 1991). Therefore, there is no scientific evidence to indicate that females will abandon pups, especially due to intermittent noise from seismic.

However, dependence on lairs is especially great for pups. Kelly *et al.* (1986) state that, if a pup in lanugo is forced to flee into the water, it may not survive the resultant heat loss. It should be noted that flight can be caused by anthropogenic disturbance, or by either polar bears or Arctic foxes (Smith *et al.* 1991). Pups that do survive swimming through the water to an alternate lair will have to expend significant amounts of energy reserves in order to maintain core temperature while drying (Taugbol 1982, Smith *et al.* 1991), especially if the pup has not formed a blubber layer. Taugbol (1982) found the birth lair to be a necessity for pup survival when, on occasion, pups must enter the water because of Arctic foxes and polar bears. In addition, wet pups may be easier prey for polar bears and Arctic foxes and less able to withstand other stresses (Smith *et al.* 1991). This could, therefore, result in an increase in pup mortality over natural mortality. On the other hand, Lydersen and Hammill's (1993) study in Svalbard of the movement and growth of dependent (unweaned) ringed seal pups that were 25 to 57 days old found that pups of those ages spent an average of 50.3 percent of their time in the water and 49.7 percent of their time hauled out on the ice. These pups used a mean of 8.7 different holes that were spaced a maximum of 900 m (2,953 ft) apart. This indicates that young ringed seals are quite mobile and readily able to move substantial distances.

While yearling seals may incur increased interactions with other seals if their primary breathing holes are lost, it is not apparent that this is a normal occurrence. Ringed seals show fairly discrete age-class segregation (Smith 1987); and yearling seals are known to share breathing holes; and subadults may share lairs (Smith 1987). Since the birth lair area is also the breeding area (Smith, 1987), yearling and subadult seals are actively excluded by adult breeding males from the fast-ice area (Smith 1987). As a result, few yearling seals are expected to be found in the breeding fast-ice region. It is more likely that adolescent males, those approaching maturity, not yearlings, would be subject to agonistic encounters with adult males. As a result, NMFS believes that few, if any, yearlings are expected to be indirectly killed as a result of seismic noise increasing agonistic encounters with adult male seals.

Monitoring Concerns-Population Assessments

Comment 13: Greenpeace notes (as does the applicant) that there are no recent reliable estimate of the number of ringed seals in Alaska or in the ice-covered areas of the Beaufort Sea where seismic activities will be conducted. Without baseline information (including annual recruitment rates), Greenpeace believes that it will be impossible for NMFS to make a negligible impact determination.

Response: NMFS notes that aerial surveys for ringed seals in the Beaufort Sea have been conducted in 1970, 1975–1977, 1981–1982, 1985–1987 and 1996–1997. Except for estimates from the latest surveys, density estimates have been made as illustrated in Figure 2 of the application. Extrapolating the results of the 1985–1987 surveys indicated a Beaufort/Chukchi Sea population estimate of 44,360 +9,310 (95 percent CI); however this number represents only a portion of the geographic range of the stock as many seals occur in the pack ice and along the Russian coast (Small and DeMaster 1995). Frost *et al.* (1997), for example, found only 15 percent of observed seals on the fast ice, whereas 69 percent were on the pack ice (another 15 percent was unclassified).

Based on the information provided in the above responses and because there is no information to indicate that the take would be more than by incidental harassment and that the short-term displacement of a relatively few animals will not affect the recruitment or survival of a stock numbering around 1 to 1.5 million animals in the Bering/Beaufort/Chukchi Seas (Small and DeMaster 1995), a negligible impact determination appears warranted. Therefore, while NMFS believes that it can make a negligible impact determination based upon present information, it believes that long-term monitoring will be necessary to validate its determination.

Comment 14: Greenpeace also notes that NMFS did not acknowledge concerns raised by the MMC in 1992 that there was no means to verify that the activities, by themselves and in combination with other activities, do not have adverse effects.

Response: NMFS acknowledged the MMC comment in the final rule (58 FR 4091, January 13, 1993). At that time, NMFS noted that the low level of on-ice seismic activity that had occurred in the past and was predicted for the next 5 years (400 miles/yr; 644 km/yr) did not warrant a more extensive monitoring program than was being required. NMFS noted, however, that, at the 1993 Peer-Review Workshop, NMFS would consult with appropriate groups to determine whether a different or more extensive monitoring plan, as recommended, was appropriate. That workshop did not result in recommended modifications to the monitoring plan.

NMFS notes that, in the above referenced letter, the MMC stated that it would be difficult, time-consuming, and prohibitively expensive to test the various hypotheses that could be made on how ringed seals could be disadvantaged by oil and gas exploration seismic activities. As an alternative, they suggested the design and carrying out of a long-term population monitoring program to ensure that any adverse changes in population size or distribution could be detected and stopped before the population could be disadvantaged.

Comment 15: NMFS must develop a plan to carry out future population monitoring in order that a basis will be

established for determining whether takes associated with winter seismic activities will have a negligible impact regionally and for the Beaufort Sea population.

Response: NMFS agrees, noting however that, under Federal and State funding, researchers are presently monitoring the distribution and abundance of ringed seals in northern Alaska. This research includes (1) estimating the relative abundance and density of molting ringed seals on fast ice in the Beaufort Sea during 1996–1998 and comparing this data with data collected during 1985–1987; (2) correlating ringed seal densities on fast ice with environmental parameters; (3) determining the abundance and density of molting ringed seals at and near industrial operations and comparing this data with otherwise comparable non-industrial area; and (4) reviewing the adequacy of ringed seal data collected by past industry site-specific monitoring programs and making recommendations for protocols to be used in future industry studies. While a final report is not due until March 1999, preliminary research results should be available earlier.

NMFS intends to discuss research and monitoring needs for determining impacts from on-ice seismic activities as part of its annually planned Arctic Peer-Review Workshop in 1998. If monitoring measures are recommended by the Workshop participants, these measures will be incorporated into LOAs for the winter of 1998/99.

Monitoring Concerns-Methodology

Comment 16: Commenters noted that the monitoring program during the past 5 years and the one proposed for the next 5 years will not provide information on the impacts on ringed seals by seismic activities.

Response: While NMFS notes that little monitoring for this activity has been carried out in the past, the level of monitoring prescribed for 1993–1997 was commensurate with the expected impact on ringed seals (480 harassments/yr). The basic purpose for monitoring small take authorizations in the Arctic is to verify the predicted effects, to detect any unforeseen effects of oil and gas exploration activities (Swartz and Hofman 1991), and to verify that the assumption made regarding negligible impact is supportable. The purpose therefore for a site-specific monitoring program is to (1) determine when, where, how, and how many marine mammals, by species, age/size, and sex are taken, and (2) document for retrospective analysis, the nature, location, duration, and scale of pre- and post-leasing oil and gas exploration activities that might affect marine mammals (Swartz and Hofman 1991). While there is no information that takings are having a more than negligible impact on ringed seals, monitoring during vibroseis surveys is warranted provided monitoring is practical, cost effective and does not result in increasing substantially marine mammal takes. If a monitoring program cannot be designed to meet these criteria, a research program might be warranted as a practical alternative to support a negligible impact finding.

Comment 17: Noting the lack of an effective monitoring program, the commenter noted that there are three possible means for monitoring ringed seal effects by on-ice seismic operations: (1) aerial surveys, (2) remote sensing, and (3) surveys using trained dogs.

Response: As discussed above, aerial surveys have been and are presently being conducted in May and June, when ringed seals are spending more of their time on the surface of the ice basking. Unfortunately, these surveys do not necessarily indicate the magnitude of impacts (displacement) from seismic activities conducted earlier in the year. To provide estimates of impact, research initiatives were begun in 1981 and 1982, including on-ice surveys using trained retrievers and radio telemetry (see Kelly *et al.* 1988).

As the commenter noted in his letter, the use of remote sensing is still limited in its utility for locating breathing holes. NMFS notes, however, that infra-red remote censusing is currently being used for locating polar bear dens and may provide useful information in locating ringed seal lairs.

The use of trained dogs and/or telemetry to locate ringed seal lairs is currently the only practical method identified to directly assess impacts on ringed seals from on-ice seismic activities. The feasibility of using this technology, or other methodology such as measurements of ringed seal vocalizations in response to seismic noise, will be assessed at the Arctic Peer-Review Workshop, and a determination made at that time regarding feasibility, practicality, and its applicability to respond to monitoring needs noted in comment 16 above. Those showing promise of success will either be implemented as a monitoring requirement for future year LOAs or be recommended for additional research.

Comment 18: The MMC notes that NMFS has requirements for having survey groups designate a qualified individual to observe and record the presence of ringed seals along seismic lines and around camps. They note however that the training (or monitoring requirements-see above) may not be enough to locate ringed seal lairs.

Response: NMFS notes that having seismic crews knowledgeable about ringed seal lair locations and keeping an observation for them is insufficient by itself to mitigate, to the greatest extent practicable, the take of ringed seals. As a result, NMFS has modified the regulations to authorize NMFS to require, when necessary, under a LOA, either a marine mammal biologist trained in ice-seal behavior, or an Inuit native from the Arctic who is familiar with ice seal behavior.

Monitoring Concerns—Peer Review

Comment 19: Greenpeace notes that the proposed rules lack a requirement for a peer-review overall monitoring program that could measure both site-specific take and effects on the rates of recruitment or survival of the Beaufort Sea population.

Response: NMFS notes that peer-review is not a statutory requirement for small take authorizations issued under section 101(a)(5)(A) of the MMPA. As a result, paragraph 216.105 (b)(3) of this part does not mandate peer review of monitoring plans; it only notes that, under activity-specific regulations, a peer-review process may be established if warranted (see 61 FR 15884, April 6, 1996). The need for peer-review is determined through notice and comment on the proposed rule for the applicant's activity. At the 1998 Arctic Peer-Review Workshop, reviews will be conducted by NMFS scientists and others, and the results will be available prior to issuance of the following year's authorizations.

Mitigation Concerns

Comment 20: The MMC recommends that NMFS promulgate regulations subject to the following mitigation requirements: (1) Surveys sufficient to detect the locations of ringed seals and ringed seal lairs that could be affected by the seismic operations be conducted prior to finalizing the tracklines and initiating such operations; (2) the tracklines for the seismic operations that reflect the results of those surveys so as to avoid active ringed seal lairs to the maximum extent practicable, and thereby minimizing the possible effects on ringed seals; and (3) a monitoring program sufficient to provide accurate estimates of the number of seals and lairs affected and the biological significance of the effects.

Response: Present technology requires the use of trained dogs to locate ringed seal lairs. While these dogs can locate ringed seal lairs up to 150 m (492 ft)

away when tracking perpendicular to the wind (Burns and Kelly 1986), because vibroseis equipment has a displacement effect to 150 m (492 ft), at least two tracks would be needed prior to initiating seismic surveys. However, such surveys are not without impact themselves, as dogs have been documented to cause ringed seal lair abandonment at 6 m (18 ft) and snowmobiles (used by the dog's handlers and scientists) at 2.8 km (1.7 mi). Therefore, a research design would be needed to minimize displacement takes by researchers/monitors prior to making this a requirement of the LOA. As noted in previous authorization (January 13, 1993, 58 FR 4091), as a result of a comment from the MMC, NMFS raised the relevancy of using dogs to locate ringed seals and ringed seal lairs at the 1993 Peer Review Workshop in Seattle. The consensus of those in attendance that the use of dogs to locate ringed seal lairs and breathing holes resulted in an increased harassment of ringed seals and in a potential increase in interactions between humans and polar bears (which apparently are attracted by the dogs). Finally, NMFS notes that trained Labrador retrievers are more effective than native dogs in locating seal lairs, but they are expensive to rear and train.

Research Concerns

Comment 21: Commenters noted the lack of research initiatives to assess impacts for on-ice seismic activities.

Response: NMFS disagrees. NMFS notes that several studies were conducted in the past, most around the time of the first application for a small take authorization in 1982 (see 47 FR 21248, May 18, 1982). The results from this research, which was summarized in the application and proposed rule, indicated to NMFS that on-ice seismic activities would not have more than a negligible impact on ringed seals. Most of the documented disturbances resulted in displacement of the animal.

As mentioned in the application, the Alaska Department of Fish and Game in cooperation with Minerals Management Service (MMS) will make estimates of the relative abundance and density of molting ringed seals on fast ice in the Beaufort Sea during 1996–1998 and compare these results with data collected during 1985–1987. They will also correlate ringed seal densities on fast ice with environmental parameters and determine the abundance and density of molting ringed seals at and near industrial operations, and compare that data with data from an otherwise comparable non-industrial area.

National Environmental Policy Act (NEPA) Concerns

Comment 22: Greenpeace believes that the impacts from winter seismic activities cannot be assessed separately from cumulative impacts from expanding offshore exploratory drilling, development and transportation activities that may follow or are already occurring.

Response: NMFS agrees, noting, however, that cumulative impacts from offshore exploratory drilling activities (which include both open water and on-ice seismic activities) were addressed in the respective environmental impact statements (EISs) for the Arctic leases. These documents were prepared by MMS. Additionally, MMS prepares NEPA documentation that, in part, discusses the cumulative impacts of all lease sales contemplated over individual 5-year periods. Because NMFS does not authorize the lease sales and does not permit the activity (seismic exploration), only the taking of marine mammals incidental to that activity, it is not required to consider cumulative impacts from all oil and gas activities. However, NMFS is responsible for making a determination that the total taking by the activity (on-ice seismic) is having no more than a negligible impact on marine mammal stocks and that the taking is not having an unmitigable adverse impact on subsistence needs. *Comment 23*: Greenpeace believes that, because bearded seals have not been discussed in previous small take authorizations, NEPA documentation is warranted.

Response: While NMFS disagrees that the potential for the incidental harassment of a very small number of bearded seals (see above discussion) requires NEPA analysis, NMFS has prepared a new EA to better define and analyze the impacts on marine mammals from the proposed action and identified alternatives.

Other Concerns

Comment 24: Greenpeace believes that NMFS and the U.S. Fish and Wildlife Service are each evaluating the impacts of oil and gas exploration small take authorizations on their respective species and not considering the impacts each authorization has on the other's species.

Response: As a result of this comment, NMFS has incorporated by reference into the EA a discussion on polar bears and the potential impact of harassing ringed seals on those polar bears that feed upon them. The finding of that analysis was that the short-distance displacement of ringed seals in the vicinity of on-ice seismic operations would have a significant impact on neither ringed seals nor the polar bears that prey on them. Because seismic operations are limited to the shorefast ice and because polar bears prefer pack ice, seismic effects are considered minimal on polar bear prey.

Comment 25: The MMC believes NMFS should expand the discussion of impacts on ringed seals from on-ice seismic by discussing the impacts to ringed seal prey, particularly Arctic cod.

Response: Airguns, waterguns and vibroseis devices were specifically designed to eliminate the fish kills that were caused during the 1950s by underwater explosions used during geophysical exploration. Explosives caused a rapid rise to peak pressure, measured in microseconds, whereas seismic device rise time is measured in milliseconds. The difference is that the rapid rise time involves very high pressures at high frequencies, which kills fish at substantial range. The main sonic injury to fish involves a damaging resonance of their air-filled swim bladders by high frequency pressure waves. In contrast, for example, large fish need to be within about 3 m (9 ft) of an airgun array to be injured or killed, and at distances between 3 m and 100 m (9 ft and 328 ft), large fish exhibit only a change in behavior. The low frequency sound of the vibroseis and airguns therefore, should have little effect on those species of fish that are the prey of ringed seals.

Comment 26: Greenpeace believes that NMFS has ignored the potential harm that could occur from chronic fuel spills and major oil spills. Winter oil or hazardous material spills under the ice may preferentially flow to the under-ice breathing holes, refrozen cracks or birthing lair entrances of ringed seals.

Response: A survey crew carries fuel oil intended for motor vehicles and for heating living quarters on sleighs, as described in the application. Should one of these fuel cells leak or break due to an accident, a spill contingency plan would be put into operation immediately. Such spills would be expected to be small and localized. No hazardous materials are used in vibroseis or watergun seismic surveys.

Changes From the Proposed Rule

1. The effective dates of the regulations have been corrected to show that the expiration date is December 31, 2002.

2. The final rule has been amended to allow NMFS to require additional monitoring and research under a LOA based upon a peer review process.

3. The final rule has been amended to add requirements for obtaining an LOA and ensuring coordination with Alaskan Native communities.

NEPA

In conjunction with a notice of proposed rulemaking on this issue on September 15, 1992 (57 FR 42538), NMFS released an EA that addressed the impacts on the human environment from regulations and the issuance of LOAs and the alternatives to that proposed action. As a result of the information provided in the EA, NOAA concluded that implementation of either the preferred alternative or other identified alternatives would not have a significant impact on the human environment. As a result of that finding, on July 30, 1992, NMFS signed a Finding of No Significant Impact (FONSI) statement and thereby determined that an EIS was not warranted and, therefore, none was prepared. As NMFS explained in the proposed rule (62 FR 55564, October 27, 1997), because the proposed action discussed in this document is not substantially different from the 1992 action, and because a reference search has indicated that no new scientific information or analyses have been developed in the past 5 years significant enough to warrant new NEPA documentation, NMFS did not intend to prepare a new EA. However, based on comments received, NMFS has updated the 1992 EA with information provided in BPXA's application and a review of recent science. This new EA indicates that, as in the 1992 EA, implementation of either the preferred alternative or other identified alternatives would not have a significant impact on the human environment. As a result of that finding NMFS has signed a Finding of No Significant Impact (FONSI) statement and thereby determined that an EIS was not warranted. Therefore, none has been prepared. A copy of the 1997 EA and FONSI is available upon request (see **ADDRESSES**).

Classification

This action has been determined to be not significant for purposes of E.O. 12866.

Section 553(d) of Title 5 of the U.S.C. requires that the publication of a substantive rule shall be made not less than 30 days before its effective date unless the rule grants or recognizes an exemption or relieves a restriction. Until these regulations are effective, seismic operators can not be issued LOAs authorizing takings incidental to their operations. This places the seismic operators in a position of potentially violat-ing the MMPA should their activities result in a take of a marine mammal. Therefore, the Assistant Administrator for Fisheries, NOAA finds that the waiver of the 30-day delayed effectiveness date relieves a restriction pursuant to 5 U.S.C. 553(d)(1).

The Assistant General Counsel for Legislation and Regulation of the Department of Commerce certified to the Small Business Administration at the proposed rule stage that, if this rule is adopted, it would not have a significant economic impact on a substantial number of small entities as described in the Regulatory Flexibility Act because members of the industry requesting the authorizations are major energy exploration companies and their contractors, neither of which by definition is a small business. Therefore, a regulatory flexibility analysis is not required.

This proposed rule contains collection-of-information requirements subject to the provisions of the Paperwork Reduction Act (PRA). This collection, which has an OMB control number of 0648–0151, has been submitted to OMB for review under section 3504(b) of the PRA.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number.

The reporting burden for this collection is estimated to be approximately 3 hours per response for requesting an authorization (as described in 50 CFR 216.104) and 30 hours per response for submitting reports, including the time for gathering and maintaining the data needed, and completing and reviewing the collection of information. Please send any comments to NMFS and OMB (see **ADDRESSES**).

List of Subjects in 50 CFR Part 216

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: January 23, 1998

David L. Evans,

Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set forth in the preamble, 50 CFR part 216 is amended as follows:

PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

1. The authority citation for part 216 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*, unless otherwise noted.

2. Subpart J is revised to read as follows:

Subpart J—Taking of Ringed Seals Incidental to On-Ice Seismic Activities

Sec.

Subpart J—Taking of Ringed Seals Incidental to On-Ice Seismic Activities

§ 216.111 Specified activity and specified geographical region.

Regulations in this subpart apply only to the incidental taking of ringed seals (*Phoca hispida*) and bearded seals (*Erignathus barbatus*) by U.S. citizens engaged in on-ice seismic exploratory and associated activities over the Outer Continental Shelf of the Beaufort Sea of Alaska, from the shore outward to 45 mi (72 km) and from Point Barrow east to Demarcation Point, from January 1 through May 31 of any calendar year.

§ 216.112 Effective dates.

Regulations in this subpart are effective from February 2, 1998 through December 31, 2002.

§ 216.113 Permissible methods.

The incidental, but not intentional, taking of ringed and bearded seals from January 1 through May 31 by U.S. citizens holding a Letter of Authorization, issued under § 216.106, is permitted during the course of the following activities:

(a) On-ice geophysical seismic activities involving vibrator-type, airgun, or other energy source equipment shown to have similar or lesser effects.

(b) Operation of transportation and camp facilities associated with seismic activities.

§ 216.114 Mitigation.

(a) All activities identified in § 216.113 must be conducted in a manner that minimizes to the greatest extent practicable adverse effects on ringed and bearded seals and their habitat.

(b) All activities identified in § 216.113 must be conducted as far as practicable from any observed ringed or bearded seal or ringed seal lair. No energy source must be placed over an observed ringed seal lair, whether or not any seal is present.

§ 216.115 Requirements for monitoring and reporting.

(a) Holders of Letters of Authorization are required to cooperate with the National Marine Fisheries Service and any other Federal, state, or local agency monitoring the impacts on ringed or bearded seals.

(b) Holders of Letters of Authorization must designate qualified on-site individuals, as specified in the Letter of Authorization, to observe and record the presence of ringed or bearded seals and ringed seal lairs along shot lines and around camps, and the information required in paragraph (d) of this section.

(c) Holders of Letters of Authorization must conduct additional monitoring as required under an annual Letter of Authorization.

(d) An annual report must be submitted to the Assistant Administrator for Fisheries within 90 days after completing each year's activities and must include the following information:

(1) Location(s) of survey activities.

(2) Level of effort (e.g., duration, area surveyed, number of surveys), methods used, and a description of habitat (e.g., ice thickness, surface topography) for each location.

(3) Numbers of ringed seals, bearded seals, or other marine mammals observed, proximity to seismic or associated activities, and any seal reactions observed for each location.

(4) Numbers of ringed seal lairs observed and proximity to seismic or associated activities for each location.

(5) Other information as required in a Letter of Authorization.

§ 216.116 Applications for Letters of Authorization.

(a) To incidentally take ringed and bearded seals pursuant to these regulations, each company conducting seismic operations between January 1 and May 31 in the geographical area described in § 216.111, must apply for and obtain a Letter of Authorization in accordance with § 216.106.

(b) The application must be submitted to the National Marine Fisheries Service at least 90 days before the activity is scheduled to begin.

(c) Applications for Letters of Authorization and for renewals of Letters of Authorization must include the following:

(1) Name of company requesting the authorization;

(2) A description of the activity including method to be used (vibroseis, airgun, watergun), the dates and duration of the activity, the specific location of the activity and the estimated area that will actually be affected by the exploratory activity;

(3) Any plans to monitor the behavior and effects of the activity on marine mammals;

(4) A description of what measures the applicant has taken and/or will take to ensure that proposed activities will not interfere with subsistence sealing; and

(5) What plans the applicant has to continue to meet with the affected communities, both prior to and while conducting the activity, to resolve conflicts and to notify the communities of any changes in the operation.

(d) A copy of the Letter of Authorization must be in the possession of the persons conducting activities that may involve incidental takings of ringed and bearded seals.

§ 216.117 Renewal of Letters of Authorization.

(a) A Letter of Authorization issued under § 216.106 for the activity identified in § 216.111 will be renewed annually upon:

(1) Timely receipt of the reports required under § 216.115(d), which have been reviewed by the Assistant Administrator and determined to be acceptable; and

(2) A determination that the mitigation measures required under § 216.114(b) and the Letter of Authorization have been undertaken.

(b) A notice of issuance of a Letter of Authorization or of a renewal of a Letter of Authorization will be published in the **Federal Register** within 30 days of issuance.

§ 216.118 Modifications to Letters of Authorization.

(a) In addition to complying with the provisions of § 216.106, except as provided in paragraph (b) of this section, no substantive modification, including withdrawal or suspension, to a Letter of Authorization issued pursuant to § 216.106 and subject to the provisions of this subpart shall be made until after notice and an opportunity for public comment. For purposes of this paragraph, renewal of a Letter of Authorization under § 216.117, without modification, is not considered a substantive modification.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 216.111, the Letter of Authorization issued pursuant to § 216.106, or renewed pursuant to this section may be substantively modified without prior notice and an opportunity for public comment. A notice will be published in the **Federal Register** subsequent to the action.

§ 216.119 [Reserved]

[FR Doc. 98–2248 Filed 1–30–98; 8:45 am]

BILLING CODE 3510–22–F