

# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Silver Spring, MD 20910

#### Incidental Harassment Authorization

BP Exploration (Alaska), Inc. (BP), P.O.Box 196612, 900 E. Benson Boulevard, Anchorage, Alaska 99519-6612, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)) and 50 CFR 216.107 to take, by Level B harassment only, small numbers of marine mammals incidental to conducting an open-water ocean bottom cable (OBC) seismic survey in the Simpson Lagoon of the Alaskan Beaufort Sea, contingent upon the following conditions:

- 1. This Authorization is valid from July 1, 2012, through October 15, 2012.
- 2. This Authorization is valid only for activities associated with open-water OBC seismic surveys and related activities in the Beaufort Sea. The specific areas where BP's surveys will be conducted are within the Simpson Lagoon Area, Beaufort Sea, Alaska, as shown in Figure 1.2 of BP's IHA application.
- 3. (a) The species authorized for incidental harassment takings, Level B harassment only, are: beluga whales (*Delphinapterus leucas*); harbor porpoises (*Phocoena phocoena*); killer whales (*Orcinus orca*); bowhead whales (*Balaena mysticetus*); gray whales (*Eschrichtius robustus*); minke whales (*Balaenoptera acutorostrata*); bearded seals (*Erignathus barbatus*); spotted seals (*Phoca largha*); ringed seals (*P. hispida*); and ribbon seals (*P. fasciata*).
  - (b) The authorization for taking by harassment is limited to the following acoustic sources and from the following activities:
    - (i) 640 in<sup>3</sup> airgun arrays for each of the two main source vessels;
    - (ii) 320 in<sup>3</sup> airgun array for one mini source vessels; and
    - (ii) Vessel activities related with the OBC seismic surveys.
  - (c) The taking of any marine mammal in a manner prohibited under this Authorization must be reported within 24 hours of the taking to the Alaska Regional Administrator (907-586-7221) or his designee in Anchorage (907-271-3023), National Marine Fisheries Service (NMFS) and the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at (301) 427-8401, or his designee (301-427-8418).





4. The holder of this Authorization must notify the Chief of the Permits and Conservation Division, Office of Protected Resources, at least 48 hours prior to the start of collecting seismic data (unless constrained by the date of issuance of this Authorization in which case notification shall be made as soon as possible).

#### 5. Prohibitions

- (a) The taking, by incidental harassment only, is limited to the species listed under condition 3(a) above and by the numbers listed in Table 1 (attached). The taking by Level A harassment, injury or death of these species or the taking by harassment, injury or death of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.
- (b) The taking of any marine mammal is prohibited whenever the required source vessel protected species observers (PSOs), required by condition 7(a)(i), are not onboard in conformance with condition 7(a)(i) of this Authorization.

## 6. Mitigation

# (a) Seismic Operation Mitigation:

(i) Whenever a marine mammal is detected outside the exclusion zone radius and based on its position and motion relative to the ship track is likely to enter the exclusion radius, calculate and implement an alternative ship speed or track or denergize the airgun array, as described in condition 6(a)(iv) below.

#### (ii) Exclusion Zones:

- (A) Establish and monitor with trained PSOs a preliminary exclusion zone for cetaceans surrounding the airgun array on the source vessel where the received level would be 180 dB re 1 µPa rms. For purposes of the field verification test, described in condition 7(b), this radius is estimated to be 750 m (2,460 ft) from the seismic source for the 640 in<sup>3</sup> airgun arrays, 480 m (1,574 ft) for the 320 in<sup>3</sup> airgun array, and 59 m (194 ft) for a single 40 in<sup>3</sup> airgun for surveys conducted inside barrier islandss; and 950 m (3,116 ft) for 640 in<sup>3</sup> airgun arrays and less than 50 m (164 ft) for a single 40 in<sup>3</sup> airgun for surveys conducted outside barrier islandss.
- (B) Establish and monitor with trained PSOs a preliminary exclusion zone for pinnipeds surrounding the airgun array on the source vessel where the received level would be 190 dB re 1  $\mu$ Pa rms. For purposes of the field verification test described in condition 7(b), this radius is estimated to be 310 m (1,017 ft) from the seismic source for the 640 in<sup>3</sup> airgun arrays, 160 m (525 ft) for the 320 in<sup>3</sup> airgun array, and 16 m (53 ft) for the single 40 in<sup>3</sup> airgun for surveys conducted inside barrier islandss; and 120 m (394 ft)

for 640 in<sup>3</sup> airgun arrays and less than 50 m (164 ft) for a single 40 in<sup>3</sup> airgun for surveys conducted outside barrier islands.

- (C) A 120-dB vessel monitoring zone for four or more bowhead cow/calf pairs will be established and monitored after August 25, 2012, from monitoring vessel outside the barrier islands during all daytime seismic surveys, as described in 7(a)(iv) below. For purposes of the field verification test described in condition 7(b), this radius is estimated to be 6,400 m (20,992 ft) from the seismic source for the 640 in<sup>3</sup> airgun arrays, 5,700 m (18,700 ft) for the 320 in<sup>3</sup> airgun array, and 3,700 m (12,140 ft) for the single 40 in<sup>3</sup> airgun for surveys conducted inside barrier islands.
- (D) Immediately upon completion of data analysis of the field verification measurements required under condition 7(b) below, the new 180-dB and 190-dB marine mammal exclusion zones shall be established based on the sound source verification.

# (iii) Ramp-up:

- (A) A ramp up, following a cold start, can be applied if the exclusion zone has been free of marine mammals for a consecutive 30-minute period. The entire exclusion zone must have been visible during these 30 minutes. If the entire exclusion zone is not visible, then ramp up from a cold start cannot begin.
- (B) Ramp up procedures from a cold start shall be delayed if a marine mammal is sighted within the exclusion zone during the 30-minute period prior to the ramp up. The delay shall last until the marine mammal(s) has been observed to leave the exclusion zone or until the animal(s) is not sighted for at least 15 or 30 minutes. The 15 minutes applies to small toothed whales and pinnipeds, while a 30 minute observation period applies to baleen whales and large toothed whales.
- (C) A ramp up, following a shutdown, can be applied if the marine mammal(s) for which the shutdown occurred has been observed to leave the exclusion zone or until the animal(s) is not sighted for at least 15 minutes (small toothed whales and pinnipeds) or 30 minutes (baleen whales and large toothed whales).
- (D) If, for any reason, electrical power to the airgun array has been discontinued for a period of 10 minutes or more, ramp-up procedures shall be implemented. Only if the PSO watch has been suspended, a 30-minute clearance of the exclusion zone is required prior to commencing ramp-up. Discontinuation of airgun activity for less than 10 minutes does not require a ramp-up.

(E) The seismic operator and PSOs shall maintain records of the times when ramp-ups start and when the airgun arrays reach full power.

## (iv) Power-down/Shutdown:

- (A) The airgun array shall be immediately powered down (reduction in the number of operating airguns such that the radii of exclusion zones are decreased) whenever a marine mammal is sighted approaching close to or within the applicable exclusion zone of the full array, but is outside the applicable exclusion zone of the single mitigation airgun.
- (B) If a marine mammal is already within the exclusion zone when first detected, the airguns shall be powered down immediately.
- (C) Following a power-down, ramp up to the full airgun array shall not resume until the marine mammal has cleared the exclusion zone. The animal will be considered to have cleared the exclusion zone if it is visually observed to have left the exclusion zone of the full array, or has not been seen within the zone for 15 minutes (pinnipeds or small toothed whales) or 30 minutes (baleen whales or large toothed whales).
- (D) If a marine mammal is sighted within or about to enter the 190 or 180 dB (rms) applicable exclusion zone of the single mitigation airgun, the airgun array shall be shutdown.
- (E) Whenever more than four or more bowhead cow/calf pairs are observed within or entering the 120 dB disturbance zone the lead PSO on monitoring vessel will immediately contact the lead PSO on the source vessel, who will ensure prompt implementation of airgun power downs or shut-downs.
- (F) Airgun activity shall not resume until the marine mammal has cleared the exclusion zone of the full array. The animal will be considered to have cleared the exclusion zone as described above under ramp up procedures.

## (iv) Poor Visibility Conditions:

- (A) If during foggy conditions, heavy snow or rain, or darkness, the full 180 dB exclusion zone is not visible without using vessel lights, night vision devices, and/or forward looking infrared, the airguns cannot commence a ramp-up procedure from a full shut-down.
- (B) If one or more airguns have been operational before nightfall or before the onset of poor visibility conditions, they can remain operational throughout the night or poor visibility conditions. In this case ramp-up procedures can be initiated, even though the exclusion zone may not be

visible, on the assumption that marine mammals will be alerted by the sounds from the single airgun and have moved away.

(C) Airguns shall not be fired during long transits when exploration activities are not occurring, including the common firing of one airgun (also referred to as the "mitigation gun" in past IHAs). This does not apply to turns when starting a new track line.

# (b) Vessel and Helicopter Movement Mitigation:

- (i) Avoid concentrations or groups of whales by all vessels under the direction of BP. Operators of support vessels should, at all times, conduct their activities at the maximum distance possible from such concentrations of whales.
- (ii) Transit and cable laying vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs. If any barge or transit vessel approaches within 1.6 km (1 mi) of observed bowhead whales, except when providing emergency assistance to whalers or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:
  - (A) Reducing vessel speed to less than 5 knots within 300 yards (900 feet or 274 m) of the whale(s);
  - (B) Steering around the whale(s) if possible;
  - (C) Operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;
  - (D) Operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and
  - (E) Checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.
  - (F) Reducing vessel speed to less than 9 knots when weather conditions reduce visibility.
- (iii) When weather conditions require, such as when visibility drops, adjust vessel speed accordingly to avoid the likelihood of injury to whales.
- (iv) In the event that any aircraft (such as helicopters) are used to support the planned survey, the mitigation measures below would apply:

- (A) Under no circumstances, other than an emergency, shall aircraft be operated at an altitude lower than 1,000 feet above sea level (ASL) when within 0.3 mile (0.5 km) of groups of whales.
- (B) Helicopters shall not hover or circle above or within 0.3 mile (0.5 km) of groups of whales.

# (c) Mitigation Measures for Subsistence Activities:

- (i) No seismic surveys with airgun operations shall be conducted within the barrier islands before July 25, 2012; and no airgun operations shall be conducted in the area north of the barrier islands after 25 August, 2012;
- (ii) Fully implement the following measures, consistent with the 2012 Conflict Avoidance Agreement (CAA) and Plan of Cooperation (COP), in order to avoid having an unmitigable adverse impact on the availability of marine mammal species or stocks for taking for subsistence uses:
  - (A) For the purposes of reducing or eliminating conflicts between subsistence whaling activities and BP's survey program, the holder of this Authorization will participate with other operators in the Communication and Call Centers (Com-Center) Program. The Com-Centers will be operated 24 hours/day during the 2012 fall subsistence bowhead whale hunt.
  - (B) BP shall routinely call the Com-Center according to the established protocol in the CAA while in the Beaufort Sea.
  - (C) The appropriate Com-Center shall be notified if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from announced course.
  - (D) Upon notification by a Com-Center operator of an at-sea emergency, the holder of this Authorization shall provide such assistance as necessary to prevent the loss of life, if conditions allow the holder of this Authorization to safely do so.
  - (E) Post-season Review: Following the end of the fall 2012 bowhead whale subsistence hunt and prior to the 2013 pre-season introduction meetings, BP shall offer to the Alaska Eskimo Whaling Commission (AEWC) Chairman to host a joint meeting with all whaling captains of the Villages of Nuiqsut, Kaktovik, and Barrow, the Marine Mammal Observer / Inupiat Communicators stations on BP's vessels in the Beaufort Sea, and with the Chairman and Executive Director of the AEWC, at a mutually agreed upon time and place on the North Slope of Alaska, to review the results of the 2012 Beaufort Sea open-water season, unless it is agreed by

all designated individuals or their representatives that such a meeting is not necessary.

## 7. Monitoring:

# (a) <u>Vessel Monitoring</u>:

- (i) The holder of this Authorization must designate biologically-trained, onsite individuals (PSOs) to be onboard the source vessel and monitoring vessels outside the barrier islands, who are approved in advance by NMFS, to conduct the visual monitoring programs required under this Authorization and to record the effects of seismic surveys and the resulting noise on marine mammals.
  - (A) PSO teams shall consist of Inupiat observers and experienced field biologists. An experienced field crew leader will supervise the PSO team onboard the survey vessel. New observers shall be paired with experienced observers to avoid situations where lack of experience impairs the quality of observations.
  - (B) Crew leaders and most other biologists serving as observers in 2012 will be individuals with experience as observers during recent seismic or shallow hazards monitoring projects in Alaska, the Canadian Beaufort, or other offshore areas in recent years.
  - (C) PSOs shall complete a two or three-day training session on marine mammal monitoring, to be conducted shortly before the anticipated start of the 2012 open-water season. The training session(s) will be conducted by qualified marine mammalogists with extensive crew-leader experience during previous vessel-based monitoring programs. A marine mammal observers' handbook, adapted for the specifics of the planned survey program will be reviewed as part of the training.
  - (D) If there are Alaska Native PSOs, the PSO training that is conducted prior to the start of the survey activities shall be conducted with both Alaska Native PSOs and biologist PSOs being trained at the same time in the same room. There shall not be separate training courses for the different PSOs.
  - (E) Crew members should not be used as primary PSOs because they have other duties and generally do not have the same level of expertise, experience, or training as PSOs, but they could be stationed on the fantail of the vessel to observe the near field, especially the area around the airgun array and implement a rampdown or shutdown if a marine mammal enters the safety zone (or exclusion zone).

- (F) If crew members are to be used as PSOs, they shall go through some basic training consistent with the functions they will be asked to perform. The best approach would be for crew members and PSOs to go through the same training together.
- (G) PSOs shall be trained using visual aids (e.g., videos, photos), to help them identify the species that they are likely to encounter in the conditions under which the animals will likely be seen.
- (H) BP shall train its PSOs to follow a scanning schedule that consistently distributes scanning effort according to the purpose and need for observations. For example, the schedule might call for 60% of scanning effort to be directed toward the near field and 40% at the far field. All PSOs should follow the same schedule to ensure consistency in their scanning efforts.
- (I) PSOs shall be trained in documenting the behaviors of marine mammals. PSOs should simply record the primary behavioral state (i.e., traveling, socializing, feeding, resting, approaching or moving away from vessels) and relative location of the observed marine mammals.
- (ii) To the extent possible, PSOs should be on duty for four (4) consecutive hours or less, although more than one four-hour shift per day is acceptable.
- (iii) Monitoring is to be conducted by the PSOs onboard the active seismic vessel, to (A) ensure that no marine mammals enter the appropriate exclusion zone whenever the seismic acoustic sources are on, and (B) to record marine mammal activity as described in condition 7(a)(vii) below. Two PSOs will be present on each seismic source vessel. At least one PSO shall monitor for marine mammals at any time during daylight hours.
- (iv) Monitoring vessel based surveys outside the barrier islands will be conducted up to 3 days per week, weather depending, after August 25, 2012, and continue until the end of the data acquisition period. One PSO will be present on the monitoring vessel. The monitoring effort will be aided by the skipper of the monitoring vessel.
- (v) At all times, the crew must be instructed to keep watch for marine mammals. If any are sighted, the bridge watch-stander must immediately notify the PSO(s) on-watch. If a marine mammal is within or closely approaching its designated exclusion zone, the seismic acoustic sources must be immediately powered down or shutdown (in accordance with condition 6(a)(iv) above).
- (vi) Observations by the PSOs on marine mammal presence and activity will begin a minimum of 30 minutes prior to the estimated time that the seismic source is to be turned on and/or ramped-up.

- (vii) All marine mammal observations and any airgun power-down, shut-down and ramp-up will be recorded in a standardized format. Data will be entered into a custom database using a notebook computer. The accuracy of the data entry will be verified by computerized validity data checks as the data are entered and by subsequent manual checking of the database after each day. These procedures will allow initial summaries of data to be prepared during and shortly after the field program, and will facilitate transfer of the data to statistical, graphical, or other programs for further processing and archiving.
- Monitoring shall consist of recording: (A) the species, group size, age/size/sex categories (if determinable), the general behavioral activity, heading (if consistent), bearing and distance from seismic vessel, sighting cue, behavioral pace, and apparent reaction of all marine mammals seen near the seismic vessel and/or its airgun array (e.g., none, avoidance, approach, paralleling, etc); (B) the time, location, heading, speed, and activity of the vessel (shooting or not), along with sea state, visibility, cloud cover and sun glare at (I) any time a marine mammal is sighted (including pinnipeds hauled out on barrier islands), (II) at the start and end of each watch, and (III) during a watch (whenever there is a change in one or more variable); (C) the identification of all vessels that are visible within 5 km of the seismic vessel whenever a marine mammal is sighted, and the time observed, bearing, distance, heading, speed and activity of the other vessel(s); (D) any identifiable marine mammal behavioral response (sighting data should be collected in a manner that will not detract from the PSO's ability to detect marine mammals); (E) any adjustments made to operating procedures; and (F) visibility during observation periods so that total estimates of take can be corrected accordingly.
- (ix) BP shall work with its observers to develop a means for recording data that does not reduce observation time significantly.
- (x) PSOs shall use the best possible positions for observing (e.g., outside and as high on the vessel as possible), taking into account weather and other working conditions. PSOs shall carefully document visibility during observation periods so that total estimates of take can be corrected accordingly.
- (xi) PSOs shall scan systematically with the unaided eye and 7 x 50 reticle binoculars, supplemented with 20 x 60 image-stabilized Zeiss Binoculars or Fujinon 25 x 150 "Big-eye" binoculars and night-vision equipment ("Generation 3") when needed.
- (xii) PSOs shall attempt to maximize the time spent looking at the water and guarding the exclusion radii. They shall avoid the tendency to spend too much time evaluating animal behavior or entering data on forms, both of which detract from their primary purpose of monitoring the exclusion zone.

- (xiii) Night-vision equipment (Generation 3 binocular image intensifiers, or equivalent units) shall be available for use during low light hours.
- (xiv) PSOs shall understand the importance of classifying marine mammals as "unknown" or "unidentified" if they cannot identify the animals to species with confidence. In those cases, they shall note any information that might aid in the identification of the marine mammal sighted. For example, for an unidentified mysticete whale, the observers should record whether the animal had a dorsal fin.
- (xv) Additional details about unidentified marine mammal sightings, such as "blow only", mysticete with (or without) a dorsal fin, "seal splash", etc., shall be recorded.
- (xvi) PSOs on monitoring vessel outside barrier islands shall also monitor for the presence and behavior of marine mammals in the offshore area projected to be exposed to seismic sounds.
- (b) <u>Sound Source Verification</u>: Using a hydrophone system, the holder of this Authorization is required to conduct sound source verification tests for seismic airgun array(s) and vessels that are involved in the OBC seismic surveys.
  - (i) Sound source verification shall consist of distances where broadside and endfire directions at which broadband received levels reach 190, 180, 170, 160, and 120 dB re 1  $\mu$ Pa (rms) for the airgun array(s). The configurations of airgun arrays shall include at least the full array and the operation of a single source that will be used during power downs.
  - (ii) The test results shall be reported to NMFS within 5 days of completing the test.

#### (c) Acoustic Monitoring:

- (i) BP shall use the offshore monitoring vessel to monitor (periodically) the propagation of airgun sounds from within the lagoon into offshore areas during its marine mammal survey using a dipping hydrophone.
- (ii) BP shall use additional acoustic monitoring with bottom mounted recorders to verify noise propagation model results. Recorders shall be deployed throughout the entire duration of the seismic survey.

#### 8. Data Analysis and Presentation in Reports:

(a) Estimation of potential takes or exposures shall be improved for times with low visibility (such as during fog or darkness) through interpolation or possibly using a probability approach. Those data could be used to interpolate possible takes during periods of restricted visibility.

- (b) Water depth should be continuously recorded by the vessel and for each marine mammal sighting. Water depth should be accounted for in the analysis of take estimates.
- (c) BP shall be very clear in their report about what periods are considered "non-seismic" for analyses.
- (d) BP shall examine data from Bowhead Whale Aerial Survey Program and other such programs to assess possible impacts from their seismic survey.
- (e) To better assess impacts to marine mammals, data analysis shall be separated into periods when a seismic airgun array (or a single mitigation airgun) is operating and when it is not. Final and comprehensive reports to NMFS should summarize and plot:
  - (i) Data for periods when a seismic array is active and when it is not; and
  - (ii) The respective predicted received sound conditions over fairly large areas (tens of km) around operations.
- (f) To help evaluate the effectiveness of PSOs and more effectively estimate take, if appropriate data are available, BP shall perform analysis of sightability curves (detection functions) for distance-based analyses.
- (g) To better understand the potential effects of oil and gas activities on marine mammals and to facilitate integration among companies and other researchers, the following data should be obtained and provided electronically in the 90-day report:
  - (i) the location and time of each aerial or vessel-based sighting or acoustic detection;
  - (ii) position of the sighting or acoustic detection relative to ongoing operations (i.e., distance from sightings to seismic operation, drilling ship, support ship, etc.), if known;
  - (iii) the nature of activities at the time (e.g., seismic on/off);
  - (iv) any identifiable marine mammal behavioral response (sighting data should be collected in a manner that will not detract from the PSO's ability to detect marine mammals); and
  - (v) adjustments made to operating procedures.
- (h) BP should improve take estimates and statistical inference into effects of the activities by incorporating the following measures:

- (i) Reported results from all hypothesis tests should include estimates of the associated statistical power when practicable.
- (ii) Estimate and report uncertainty in all take estimates. Uncertainty could be expressed by the presentation of confidence limits, a minimum-maximum, posterior probability distribution, etc.; the exact approach would be selected based on the sampling method and data available.

## 9. Reporting:

- (a) <u>Sound Source Verification Report:</u> A report on the preliminary results of the sound source verification measurements, including the measured 190, 180, 160, and 120 dB (rms) radii of the airgun sources, shall be submitted within 14 days after collection of those measurements at the start of the field season. This report will specify the distances of the exclusion zones that were adopted for the survey.
- (b) <u>Seismic Vessel Monitoring Program</u>: A draft report will be submitted to the Director, Office of Protected Resources, NMFS, within 90 days after the end of BP's 2012 open water OBC seismic surveys in the Beaufort Seas. The report will describe in detail:
- (i) summaries of monitoring effort (e.g., total hours, total distances, and marine mammal distribution through the study period, accounting for sea state and other factors affecting visibility and detectability of marine mammals);
- (ii) analyses of the effects of various factors influencing detectability of marine mammals (e.g., sea state, number of observers, and fog/glare);
- (iii) species composition, occurrence, and distribution of marine mammal sightings, including date, water depth, numbers, age/size/gender categories (if determinable), group sizes, and ice cover;
- (iv) to better assess impacts to marine mammals, data analysis should be separated into periods when a seismic airgun array (or a single airgun) is operating and when it is not. Final and comprehensive reports to NMFS should summarize and plot: (A) Data for periods when a seismic array is active and when it is not; and (B) The respective predicted received sound conditions over fairly large areas (tens of km) around operations.
- (v) sighting rates of marine mammals during periods with and without airgun activities (and other variables that could affect detectability), such as: (A) initial sighting distances versus airgun activity state; (B) closest point of approach versus airgun activity state; (C) observed behaviors and types of movements versus airgun activity state; (D) numbers of sightings/individuals seen versus airgun activity state; (E) distribution around the survey vessel versus airgun activity state; and (F) estimates of take by harassment.

- (vi) reported results from all hypothesis tests should include estimates of the associated statistical power when practicable.
- (vii) estimate and report uncertainty in all take estimates. Uncertainty could be expressed by the presentation of confidence limits, a minimum-maximum, posterior probability distribution, etc.; the exact approach would be selected based on the sampling method and data available.
- (viii) the report should clearly compare authorized takes to the level of actual estimated takes.
- (c) The draft report will be subject to review and comment by NMFS. Any recommendations made by NMFS must be addressed in the final report prior to acceptance by NMFS. The draft report will be considered the final report for this activity under this Authorization if NMFS has not provided comments and recommendations within 90 days of receipt of the draft report.
- 10. (a) In the unanticipated event that survey operations clearly cause the take of a marine mammal in a manner prohibited by this Authorization, such as an injury (Level A harassment), serious injury or mortality (e.g., ship-strike, gear interaction, and/or entanglement), BP shall immediately cease survey operations and immediately report the incident to the Supervisor of Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to <a href="mailto:Jolie.Harrison@noaa.gov">Jolie.Harrison@noaa.gov</a> and <a href="mailto:Shane.Guan@noaa.gov">Shane.Guan@noaa.gov</a> and the Alaska Regional Stranding Coordinators (Aleria.Jensen@noaa.gov and <a href="mailto:Barbara.Mahoney@noaa.gov">Barbara.Mahoney@noaa.gov</a>). The report must include the following information:
  - (i) time, date, and location (latitude/longitude) of the incident;
  - (ii) the name and type of vessel involved;
  - (iii) the vessel's speed during and leading up to the incident;
  - (iv) description of the incident;
  - (v) status of all sound source use in the 24 hours preceding the incident;
  - (vi) water depth;
  - (vii) environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
  - (viii) description of marine mammal observations in the 24 hours preceding the incident;
    - (ix) species identification or description of the animal(s) involved;

- (x) the fate of the animal(s); and
- (xi) photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with BP to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. BP may not resume their activities until notified by NMFS via letter, email, or telephone.

- (b) In the event that BP discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), BP will immediately report the incident to the Supervisor of the Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Jolie.Harrison@noaa.gov and Shane.Guan@noaa.gov and the NMFS Alaska Stranding Hotline (1-877-925-7773) and/or by email to the Alaska Regional Stranding Coordinators (Aleria.Jensen@noaa.gov and Barabara.Mahoney@noaa.gov). The report must include the same information identified in Condition 10(a) above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with BP to determine whether modifications in the activities are appropriate.
- (c). In the event that BP discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in Condition 3 of this Authorization (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), BP shall report the incident to the Supervisor of the Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by email to Jolie.Harrison@noaa.gov and Shane.Guan@noaa.gov and the NMFS Alaska Stranding Hotline (1-877-925-7773) and/or by email to the Alaska Regional Stranding Coordinators (Aleria.Jensen@noaa.gov and Barbara.Mahoney@noaa.gov), within 24 hours of the discovery. BP shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. BP can continue its operations under such a case.
- 11. Activities related to the monitoring described in this Authorization do not require a separate scientific research permit issued under section 104 of the Marine Mammal Protection Act.
- 12. The Conflict Avoidance Agreement and the Plan of Cooperation outlining the steps that will be taken to cooperate and communicate with the native communities to ensure the availability of marine mammals for subsistence uses, must be implemented.
- 13. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible

impact on the species or stock of affected marine mammals, or if there is an unmitigable adverse impact on the availability of such species or stocks for subsistence uses.

- 14. A copy of this Authorization and the Incidental Take Statement must be in the possession of each seismic vessel operator taking marine mammals under the authority of this Incidental Harassment Authorization.
- 15. BP is required to comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion.

Helen Golde, Acting Director
Office of Protected Resources
National Marine Fisheries Service

JUN 2 9 2012

Date

Table 1. Species/stocks and numbers of marine mammals allowed to be taken incidental to under this IHA.

Species / Stocks	Take Allowed
Beluga whale / Eastern Chukchi Sea	50
Killer whale / Aleutian Islands & Bering Sea transient	3
Harbor porpoise / Bering Sea	3
Bowhead whale / Bering-Chukchi-Beaufort Sea	37
Gray whale / Eastern North Pacific	3
Minke whale / Alaska	2
Bearded seal / Alaska	17
Ribbon seal / Alaska	3
Ringed seal / Alaska	111
Spotted seal / Alaska	20