

Following discussions held during the open-water stakeholder meeting on 16 April 2008, NMFS asked BP to provide updated information relevant to the 2008 BP Liberty Seismic survey program. The requested information is provided below as an amendment to the original IHA application that was submitted to NMFS on 15 November 2007. It includes an updated vessel inventory and estimated cetacean and pinniped exposures to sound levels of ≥ 120 dB re $1 \mu\text{Pa}$.

Vessel inventory

There have been two changes in the vessel inventory since the IHA application was submitted. The source vessel M/V Maxime has been replaced with the R/V Miss Dianne and the HSE vessel Weather or Knot with F/V Mariah B. Table 1 lists all substantial vessels that BP plans to use during the 2008 Liberty seismic survey. This table replaces the vessel information in the IHA application on p3 under “mobilization.”

Table 1. Vessel inventory for the Liberty OBC Seismic Survey. New vessels are listed in italic.

Vessel name	Size	Operation	Owner
M/V Peregrine	90 x 24 ft	Source vessel	Peregrine Falcon Inc.
R/V Miss Dianne	55 x 18 ft	Source vessel	Peregrine Falcon Inc.
M/V Alganik & M/V Hook Point	80 x 24 ft & 32 x 15 ft	Recording and staging vessel	Rob Eckley
R/V Arctic Wolf	135 x 38 ft	Housing/Fuel	Fairweather Marine LCC
F/V Cape Fear	32 x 12 ft	Cable deployment/retrieval	Rob Eckley
F/V Canvasback	32 x 14 ft	Cable deployment/retrieval	John Bocci
F/V Sleep Robber	32 x 14 ft	Cable deployment/retrieval	Jeff Jensen
F/V Rumbleminz	32 x 14 ft	Cable deployment/retrieval	
M/V Qayaq Spirit	42 x 14 ft	Personnel transfer/support	Gordon Heddell
F/V Mariah B	34 x 13 ft	HSE Support vessel	
Arctic Hawk (Hovercraft)	42 x 20 ft).	Personnel transfer/support	Crowley Maritime Corp.

Cetacean and pinniped exposures to ≥ 120 dB re $1 \mu\text{Pa}$

Estimated exposures of cetaceans and pinnipeds to ≥ 120 dB re $1 \mu\text{Pa}$ are provided in Table 2. At the time of the IHA application, BP considered the possibility to resume seismic data acquisition in September/October, after the Nuiqsut bowhead hunting season. The estimated exposures and requested authorization in the IHA application are therefore based on both summer and autumn densities of cetacean (see §6.3.1 on p29 of the IHA application for more detail). Currently, BP plans to acquire seismic data in the Liberty area until the Nuiqsut whaling season starts (August 25). The estimated cetacean and pinniped exposures provided in Table 2 below are therefore calculated using only the summer densities of cetacean species and as such provides additional information to Table 6 on p31 of the IHA application.

Table 2. Summary of the number of marine mammals potentially exposed to received sound levels of ≥ 170 dB (for pinnipeds only), ≥ 160 dB and ≥ 120 dB during BP's proposed seismic survey in the Liberty area, based on safety radii for 880 in³ array and 4 m array depth. These numbers are calculated using the maximum values of the summer densities of cetacean species. na = not applicable (clarification is provided in original IHA application).

Species	Exposures		
	≥ 170 dB	≥ 160 dB	≥ 120 dB
<i>Cetaceans</i>			
Beluga whale	na	0.6	1.7
Bowhead whale	na	0.2	0.5
<i>Pinnipeds</i>			
Ringed seal	201	222	688
Bearded seal	14	16	48
Spotted seal	2	2	7

Additional Notes

In addition to those species listed in Table 2, BP requested authorization of a Level B harassment of one Narwhal. Based on comments during the Open Water Meeting, BP withdraws its request for authorization of Level B harassment of a Narwhal.