31 October 2011

Mr. P. Michael Payne, Chief Permits, Conservation, and Education Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910-3225

Re: Permit Application No. 16685

(Thomas Jefferson, Ph.D., Clymene Enterprises)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. Dr. Jefferson is requesting authorization to conduct research on nine cetacean species in waters off California during a five-year period. Some of these research activities currently are authorized under permit 13392, which he is seeking to renew and amend.

RECOMMENDATIONS

<u>The Marine Mammal Commission recommends</u> that the National Marine Fisheries Service issue the permit, provided that the Service advise Dr. Jefferson of the need to—

- have the proposed activities reviewed and approved by a collaborator's Institutional Animal Care and Use Committee prior to initiating those activities; and
- obtain additional permits from the relevant National Marine Sanctuary or the National Park Service prior to conducting the proposed activities in a sanctuary or park.

RATIONALE

Dr. Jefferson proposes to conduct research on bottlenose dolphins, Risso's dolphins, short-and long-beaked common dolphins, Pacific white-side dolphins, northern right whale dolphins, killer whales (i.e., West Coast transient and offshore stocks only), Dall's porpoise, and harbor porpoise in waters off California. The goals of the research are to obtain a better understanding of the population biology and impacts of persistent organic pollutants on coastal bottlenose dolphins and the impacts of Navy operations on nine species of cetaceans. The purposes of the proposed research are to assess (1) stock structure, (2) range patterns, (3) reproductive and stress hormone parameters, (4) contaminant concentrations, (5) social organization, and (6) behavioral interactions.

Dr. Jefferson would conduct vessel-based transect surveys year-round, primarily in the Southern California Bight and Monterey and San Francisco Bays. He seeks authorization to observe, photograph, and videotape 2,400 individuals per year from the specified stocks of cetaceans (see the take table in the application, detailing the proposed taking). Researchers under this permit would

Mr. P. Michael Payne 31 October 2011 Page 2

approach the animals at less than 5 knots and at a distance of 4–30 m to photograph or videotape them. Dr. Jefferson also would use a crossbow to collect 60 biopsy samples from individuals of each stock during the five-year period. Each individual may be taken up to four times during biopsy sampling, which would include all anticipated approaches, successful biopsy sampling of an individual, biopsy misses (i.e., the biopsy dart misses the animal and hits the water), and unsuccessful biopsy attempts (i.e., the animal dives before the biopsy dart is fired). Females with calves less than one year of age and calves estimated to be less than one year of age could be approached closely and photographed or videotaped. However, only those females would be biopsy sampled, the calves would not. In addition, the researchers would attempt to identify individuals prior to biopsy sampling to help ensure that individuals are sampled only once. Further, Dr. Jefferson would confirm the killer whale ecotype prior to approaching or biopsy sampling individual killer whales. Data would be collected to assess (1) behavioral reactions to each biopsy attempt, (2) healing of the biopsy site and general health of individual cetaceans, and (3) longer term avoidance behavior.

Dr. Jefferson would not approach closely or biopsy sample non-target species. Thus, he is not requesting authorization to harass non-target species incidental to the proposed activities. Dr. Jefferson also has cooperated and would continue to cooperate and share data with numerous researchers who are conducting research on the same species in the same areas.

The proposed activities have not been reviewed and approved by an Institutional Animal Care and Use Committee (IACUC), as required by section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations. In this case, Dr. Jefferson's institution does not have an IACUC. However, various co-investigators and collaborating institutions do have IACUCs. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Jefferson of the need to have the proposed activities reviewed and approved by a collaborator's IACUC prior to initiating those activities.

Additionally, Dr. Jefferson may need to obtain permits to conduct the proposed activities in the Monterey Bay National Marine Sanctuary, Gulf of the Farallones National Marine Sanctuary, or Channel Islands National Park. As such, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Jefferson of the need to obtain additional permits from Sanctuary offices and the National Park Service prior to conducting research activities in these areas.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the Marine Mammal Protection Act. Please contact me if you have any questions concerning the Commission's recommendations.

Timothy J. Ragen, Ph.D.

Michael L. Gorling for

Executive Director