



MARINE MAMMAL COMMISSION

15 March 2022

Ms. Jolie Harrison, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Re: Permit Application No. 22260
(Allyson Hindle, Ph.D.,
University of Nevada Las Vegas)

Dear Ms. Harrison:

The Marine Mammal Commission (the 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 (the MMPA). Dr. Hindle proposed to conduct research on Weddell seals in Antarctica during a five-year period¹.

The purpose of the research is to investigate hypoxia in Weddell seals during different dive types to understand how physiology supports and limits hypoxia tolerance in diving marine mammals. Dr. Hindle would harass, observe, photograph/videotape, restrain, transport/translocate, temporarily hold in captivity², sedate, measure/weigh, sample, mark, conduct ultrasound on, attach instruments to³, and implant instruments in⁴ non-pup Weddell seals of either sex (see the take table for specifics). Dr. Hindle requested up to two unintentional or intentional⁵ mortalities per year, as well as authorization to import samples from Weddell seals. She would use various measures to minimize impacts on non-target Weddell seals and also would be required to abide by the National Marine Fisheries Service's (NMFS) standard permit conditions. Dr. Hindle's Institutional Animal Care and Use Committee has reviewed and approved the proposed research protocols.

On 26 January 2022, NMFS published Dr. Hindle's application in the *Federal Register* (87 Fed. 3976) for public comment. Based on its informal review of the application available online, the Commission found that some of the information required in NMFS's 2016 application instructions and its implementing regulations was not clear in the application. In accordance with NMFS's

¹ The permit would be valid for five years to allow for additional time to import samples, yet only two years of field work would be authorized under the permit.

² In pens for dive tests with access to at least one breathing hole. Up to two seals could be held together at one time.

³ Including an automatic blood sampling device, satellite tag, VHF transmitter, combined time depth recorder and accelerometer, and combined PO2 sensor logger and EKG base unit. Instruments would be attached to the mid-dorsal region. A maximum number of six instruments with a maximum mass of 800g could be attached at one time to a seal.

⁴ Including an internal PO2 sensor inserted in tandem with an indwelling catheter.

⁵ Via euthanasia for humaneness purposes.

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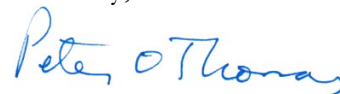
recently revised permit process, the Commission provided to NMFS a list of informal comments and questions, yet the Commission received only the applicant's responses to its comments and questions. The Commission did not receive a revised, final application based on the relevant responses. In addition, a few of the responses did not sufficiently address the Commission's initial concerns.

For example, the Commission had informally inquired what mitigation measures would be implemented if two seals held together in the pen appeared to be incompatible or showed signs of distress with each other. In response, the applicant indicated that she "will add mitigation measures for distressed animals" to the application. Thus, it appears that Dr. Hindle may have provided a response sufficient to address this concern and amended the application accordingly. However, due to NMFS's revised permit review process, NMFS no longer makes available complete, corrected applications until a decision on the permit has been made and does not allow the Commission the opportunity to seek additional clarification on responses to its informal comments. Allowing the Commission to provide a simple, follow-up inquiry to Dr. Hindle's response would likely have cleared up this matter. Instead, the protocols for mitigating any apparent incompatibility or conflict between two seals held together remain unclear in the application. As a first step, it would be prudent for researchers to assess seals for signs of incompatibility, including injuries, and if necessary, provide some controlled separation between seals to reduce their stress levels. If seals continued to show signs of stress even with separation, immediate release of the seal may be warranted. As such, the Commission recommends that NMFS require Dr. Hindle to monitor Weddell seals held together in a pen for signs of incompatibility, including aggression or injuries, and separate two seals and/or immediately release a seal if deemed necessary by the researchers.

Moreover, even though NMFS has confirmed that all relevant responses would be incorporated in a final application for Dr. Hindle, the Commission notes that some final permits and applications continue to *not* be revised based on responses to the Commission's informal comments on applications⁶. If NMFS decides to issue a permit to Dr. Hindle, the Commission recommends that NMFS ensure that the final permit and application include the relevant revisions based on responses to the Commission's informal comments.

Please contact me if you have any questions regarding the Commission's recommendations.

Sincerely,



Peter O. Thomas, Ph.D.,
Executive Director

cc: Dr. Polly Penhale, NSF

⁶ e.g., permits 25770 for Dr. Dan Costa, 25786 for Southwest Fisheries Science Center, and 22187 for Dr. Heather Liwanag.