31 March 2020

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. 23283

(Marine Mammal Lab)

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). Marine Mammal Lab (MML) proposed to conduct research on northern fur seals in California and Alaska during a five-year period—permit 14327 authorized similar activities.

The purpose of the research is to investigate (1) population status and trends, (2) demography, (3) health and disease, and (4) foraging ecology of northern fur seals. MML would harass, observe, photograph/videotape¹, handle, restrain, measure/weigh, conduct ultrasound on, mark, sample², and instrument northern fur seals of either sex and any age class each year (see the take table for specifics). MML requested unintentional³ mortalities of up to seven pups and four non-pups in California and three pups and eight non-pups in Alaska per year. Researchers would use various measures to minimize impacts on northern fur seals and other pinnipeds and also would be required to abide by the National Marine Fisheries Service's (NMFS) standard permit conditions.

Personnel qualifications

MML indicated in its personnel table that the principal investigator (PI) and co-investigators (CIs) could supervise each procedure to be authorized under the permit, including such invasive procedures as gas anesthesia, tooth extraction, and blubber biopsy. However, based on the levels of experience⁴ provided in their qualification forms (QFs), the PI and CIs indicated that they have (1)

¹ Including using unmanned aircraft systems.

² Including importing and exporting samples for analysis.

³ Via euthanasia for humaneness purposes.

⁴ Level 1 denotes having assisted or received education/training in performing the procedure, but **not having successfully performed** the procedure. Level 2 denotes having performed the procedure while **under supervision or training** of an expert (e.g., PI, CI, or veterinarian). Level 3 denotes having performed the procedure **without supervision** by a PI/CI. Level 4 denotes being considered an **expert** in performing this procedure, and having **supervised or trained** others in performing this procedure.

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only performed many of the invasive procedures under supervision (Level 2), (2) received training in or assisted others with the procedures (Level 1), or (3) lack any experience with the procedures. The Commission has repeatedly asserted that PI and CIs who do not have adequate experience to conduct a procedure unsupervised should not be authorized to supervise that procedure until having conducted the procedure successfully without supervision (Level 3 or greater).

As the Commission noted, in its 14 November 2019 letter on NMFS's revised application instructions and in numerous other letters⁵, having conducted certain procedures under supervision may be sufficient to allow a researcher to perform such procedures as a PI or CI. In fact, MML's PI and CIs adequately demonstrated in their QFs the requisite experience to be able to perform the procedures that they would be authorized to perform under the permit. However, supervising procedures, particularly those that are invasive and/or involve sedation and anesthesia, requires a higher qualification standard, as it implies both an ability to conduct the procedure unsupervised and to take control in an emergency situation. Thus, the Commission recommends that NMFS authorize a PI or CI only to supervise procedures that he or she has at least performed without supervision (Level 3 or greater).

Personnel table

MML provided a personnel table that listed the PI and each CI and the procedures that he or she could *not* conduct, as well as a statement that he or she could conduct all other procedures to be authorized under the permit. MML also stated that all personnel could supervise all procedures, as discussed previously. However, as stated in its more general 14 November 2019 letter on these matters, the Commission asserted that it is difficult to discern which activity a PI or CI would be authorized to conduct or supervise when dozens of procedures have been proposed, especially when an individual's QF does not specify any demonstrated experience for some of those procedures. To clarify which procedure a PI or CI would be authorized to conduct or supervise the personnel table should list the PI and each CI and each procedure with X's designating activities to be conducted by him or her and S's designating activities to be supervised (see Table 1 as an example). Such tables⁶ have been used routinely by MML in recent permit applications⁷, as well as by the majority of other applicants that have proposed to conduct live-capture procedures in the last three years on pinnipeds⁸ and cetaceans⁹ and by other applicants that have proposed to conduct numerous invasive procedures 10. Therefore, to provide clarity regarding the procedures that the PI and each CI is requesting authorization to conduct and supervise and ultimately is authorized to conduct and supervise if the permit is issued, the Commission recommends that NMFS require MML to provide a personnel table based on the example provided in the Commission's 14 November 2019 letter.

⁵ Including its 7 May 2019 letter on MML permit 22289 and its 20 November 2019 letter on MML permit 22678.

⁶ Which include dozens of procedures.

⁷ e.g., MML permit 22289 and MML permit 22678.

⁸ e.g., Alaska Department of Fish and Game permit 20443.

⁹ e.g., Wells permit 20455.

¹⁰ e.g., Scripps Institution of Oceanography permit 22835 and Baird permit 20605.

Table 1. Example personnel table.

Name	Role	Capture with noose	Gas anesthesia with cone or mask	External instrument	Ultrasound	Blood sample	Tooth extraction
Jon Doe	PI	S	S	S	S	S	S
Jim Doe	CI	X		X		X	X
James Doe	CI	X		X	X		
Jane Doe	CI	X		X	X	X	
Mary Doe	CI	S	X	S	S	S	
Dave Doe	CI	X		X			
Harry Doe	CI	X		X		X	

Institutional Animal Care and Use Committee (IACUC)

MML has yet to provide the research protocols to its IACUC for review and approval. NMFS's current policy¹¹ requires that the Science Centers provide the IACUC assurance statement with all applications. Based on that policy, any applications for permits or permit amendments that do not include the assurance statement are to be returned to the applicant. It has been the Office of Protected Resources' practice to not require the assurance statement at the time an application is submitted—the Science Center must provide the statement before the permit is issued. If the Office of Protected Resources believes that its IACUC policy is too restrictive in this regard, then it should consider revising the policy. However, the Commission recommends that, until such time as the policy is amended, NMFS return all permit and permit amendment applications that do not include the IACUC assurance statement to the respective Science Center and refrain from publishing those applications for public comment until the IACUC assurance statement has been provided

The Commission believes that the proposed activities are consistent with the purposes and policies of the MMPA. Please contact me if you have any questions regarding the Commission's recommendations.

Sincerely,

Peter O. Thomas, Ph.D.,

Peter o Thomas

Executive Director

¹¹ Which has been in effect since 2009.