Mystic Responses – Final Questions

File No. 22629 Final clarifying questions and comments from NMFS sent to Mystic Aquarium on April 30, 2020. Mystic Aquarium's responses received May 28, 2020.

Question 1: Michael Leven and Dr. Bossart are no longer in their positions at Georgia Aquarium. Can you provide documentation that the MOU between Georgia Aquarium and Mystic Aquarium is still valid under the new management at Georgia Aquarium?

Mystic Response 1: The previously submitted MOU has been counter-signed by Brian Davis, the current President and Chief Executive Officer of Georgia Aquarium and is submitted as an attachment (see Appendix 1 Addendum: Memorandum of Understanding between Georgia and Mystic, Updated).

Question 2: Regarding the final responses to comments in batch #2 (March 26, 2020) about circumstances for moving whales to Georgia Aquarium, the response included "As belugas are highly social animals, maintaining the animals in an optimal social grouping is essential for assurance of their welfare" and "It is standard practice among US beluga holding institutions to move belugas between facilities in order to assure optimal social groupings and animal welfare." Please clarify that the standard practice of assuring optimal social groupings would only be considered for moving the whales proposed for import to Georgia Aquarium if it were deemed an emergency for health and welfare purposes, and provide an example.

Mystic Response 2: Under Federal law, the Animal Welfare Act dictates standards for humane handling, care, and transportation of whales, which requires the attendance of a qualified veterinarian, who must be a voting member of the IACUC, and who must ensure daily observation of all whales and assess health and well-being including the prevention of injuries. The Animal Welfare Act defers to attending veterinarians in the matters of health and well-being for the handling of animals it regulates.

There are no plans to move whales, but it is essential and responsible to ensure a contingency plan to ensure animal welfare should there be circumstances that necessitate a move. With regards to circumstances to necessitate the movement of a whale, this would be a legitimate need, supported by a finding of an attending veterinarian consistent with the Animal Welfare Act concerning social, health, or other welfare reasons.

For example, at Mystic Aquarium, if an imported beluga that was selected for compatibility in the Mystic social group proves to be incompatible and our options for keeping it separated do not satisfy the attending veterinarian, this could require a move to Georgia Aquarium. Another example would be that, at Georgia, if the currently pregnant female were to die following birth but before calf weaning, the attending veterinarian may deem it necessary for Mystic to transfer a female with calf-rearing experience to Georgia to serve as a surrogate for that animal's welfare.

Question 3: Regarding the IACUC comments on the AEP study submitted with redacted IACUC comments, if any other IACUC comments are relevant to other studies proposed in the permit application, they should not be redacted. The comment received regarding whether the AEP would impact the health or welfare of the animals was also applicable for the other studies

as well. The permit application instructions indicate: "Attach the protocol forms submitted to the appropriate Institutional Animal Care and Use Committee (IACUC) established under the Animal Welfare Act (AWA), the IACUC approval, and any comments and recommendations of the IACUC." If you have any updated IACUC protocols or comments/recommendations of the IACUC, please submit them to be included with the application.

Mystic Response 3: The redacted version submitted was intended to screen out information irrelevant to the question raised. However, with this request, the full IACUC meeting minutes dated September 29, 2014 are included as an attachment (see Appendix 8 Addendum: Mystic IACUC Minutes).

Question 4: Regarding the comments and responses on the hearing study, the Co-investigators on that study were going to fill out the unlocked NMFS Technical Guidance User Spreadsheet tool and replace the PTS thresholds by TTS -10 dB and send it back for confirmation to ensure sound exposures do not exceed the NMFS Technical Guidance TTS onset thresholds. We do not have a record that this has been done. Please confirm this has been completed.

Mystic Response 4: The unlocked NMFS Technical Guidance User Spreadsheet tool has been filled out and PTS thresholds were replaced by TTS -10 dB per the Co-PI Manuel Castellote¹ See attachment (see Mystic Acoustic Technical Guidance User Spreadsheet).

Per Dr. Castellote: "Attached is the unlocked user spreadsheet with the modified thresholds for TTS - 10 dB. I modified the next cells to allow NMFS to review them:

Tab A will be used for continuous noise (ship noise, aircraft, dredging, outboard).

Cell D35 was changed to 168 (178 - 10 dB).

Tab E.1 will be used for impact hammer pile driving.

Cell D42 was changed to 160 (170 - 10 dB), and

Cell D44 changed to 214 (224 - 10 dB) although peak threshold cannot be reached with the source to be used as explained in the text we submitted."

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¹Dr. Castellote of the NMFS Alaska Fisheries Science Center, Marine Mammal Laboratory (MML) did not participate in NMFS' review of the application.