



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

APR -8 2015

Dr. Robert Burkard
University at Buffalo
510 Kimball Tower
Buffalo, NY 14214

Dear Dr. Burkard:

On behalf of National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), we thank you for agreeing to participate as a peer reviewer for a technical section of our Draft Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing¹ (Guidance). NMFS appreciates your willingness to help with this important effort.

Please note the specific requirements below. First and foremost, you must complete a conflict of interest disclosure form (attached) and provide your curriculum vitae (CV) to us for our files as soon as possible. These tasks must be completed before the review begins.

Guidance and Technical Section Background:

NOAA's Guidance is for assessing the effects of anthropogenic sound on individual marine mammal species, under NOAA's jurisdiction. Specifically, it summarizes and interprets available data on noise exposure levels that can be used to predict the onset of temporary and permanent threshold shifts (TTS and PTS, respectively) from all sound sources. It is intended for use by NOAA analysts/managers and other relevant user groups/stakeholders, including other federal agencies as a part of more comprehensive impact assessments of proposed actions involving sound.

Note: We are not asking you to review of the entire Guidance but instead one particular technical section relating to the Guidance's proposed application of impulsive and non-impulsive PTS acoustic threshold levels based on physical characteristics at the source and how those characteristics change with range.

The NOAA Acoustic Guidance is classified as a Highly Influential Scientific Assessment by the President's Office of Management and Budget. As such, independent peer review of all sections is required prior to broad public dissemination by the Federal Government.

¹ For more information on NOAA's Acoustic Guidance: <http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm>.



General Directives:

Even though, the focus of this peer review is more on the physical aspects associated with sound sources and propagation modeling, we are seeking your input on our proposal and whether it reflects what is known about noise-induced hearing loss. Please provide comments on the information and data contained within the Guidance's technical section. Specifically:

1. If you believe that technical justification or conclusions are lacking or specific information was applied incorrectly in reaching conclusions, please be specific in your comments.
2. If you believe critical data sets or publications are missing from consideration, please identify them.
3. If there are any other factors that would significantly improve this document (i.e., organization, technical considerations, etc.), please let us know.
4. If you require access to additional documents or information used in the preparation of the Guidance's technical section, please let us know.

Specific Topics of Interest for Consideration during the Peer Review:

During your review of the Guidance's technical section, please consider the following:

- Are the proposed definitions for impulsive and non-impulsive sources appropriate, and if not, what would be more appropriate definitions?
- Is the proposed method for guiding action proponents to switch from applying impulsive PTS acoustic threshold levels to non-impulsive PTS acoustic thresholds levels technically supported?
 - We are specifically interested in if the proposed methodology supports data obtained from the sound source characteristics and operations of airguns, impact pile drivers, and explosives.
 - We recognize our proposed methodology is extremely simplistic, which it is intended to be in order to encompass the vast array of impulsive sources we regulate. Are there particular situations where caution should be used applying this simplistic methodology (i.e., certain propagation conditions, certain sound sources where our proposed method may not be applicable)?
- If the proposed method is considered inappropriate, please specify an alternative method.
- Please identify specifics where more data are needed to better support the proposed method (i.e., data gaps).

Requirements of the Peer Review:

1. The President's Office of Management and Budget (OMB) published a Peer Review Bulletin (December 2004) that requires online posting of this peer review, since NOAA's Acoustic Guidance has been determined to be "highly influential." To ensure that we have a transparent process for public disclosure, names and affiliations of each peer reviewer is posted online, as well as all comments. We are required to identify peer reviewers by name and affiliation, but NMFS has the ability to post a compilation of reviewer comments. Therefore, we will not associate individual comments with a reviewer's name; rather we will compile the unabridged comments and organize by a review number. As an example, the previously submitted peer review report for NOAA's Acoustic Guidance is available at:
http://www.cio.noaa.gov/services_programs/prplans/ID43.html
2. The Peer Review Bulletin further requires that non-Federal peer reviewers complete a "Confidential Conflict of Interest Disclosure" form. This form is attached, and we request that you complete this disclosure form and provide your curriculum vitae (CV) for our files as soon as possible. These tasks must be completed before the review begins to ensure there are no issues with you participating in this review.
3. Notably, if NMFS receives a Freedom of Information Act (FOIA) request, anonymity of peer reviewers' comments cannot be guaranteed.
4. Finally, the information provided in this draft Guidance is distributed solely for the purpose of pre-dissemination peer review under applicable Information Quality Guidelines. It has not been formally disseminated by NOAA. It does not represent and should not be construed to represent any agency determination or policy. All information associated with the review document is to remain strictly confidential until NOAA releases the Guidance to the public.

Logistics:

1. NMFS anticipates that the review to begin no later than the second week of April.
2. Please provide your comments to NMFS in electronic form. If there is something NMFS can do to help facilitate you providing comments, please let us know.
3. Please forward your comments to NMFS by no later than **14 days after receipt of the Guidance's technical section**. Again, if you identify major concerns, we appreciate it if you let NMFS know as soon as possible.

NMFS will not be able to compensate you for your time. Nevertheless, we appreciate your time and effort in completing this review and would not be able to produce a scientifically robust acoustic guidance document without your valuable input. If there are technical questions relating

to the Guidance, please feel free to contact Amy Scholik-Schlomer, at (301) 427-8449 (Amy.Scholik@noaa.gov), who will serve as the point of contact for this peer review. Questions on the overall acoustic guidance process can be directed to me at (301) 427-8402 (Nicole.Leboeuf@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Nicole R. Le Boeuf". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Nicole R. Le Boeuf
Division Chief, Marine Mammal and Sea
Turtle Conservation Division
NMFS Office of Protected Resources

Attachment:

1. Conflict of Interest Form