

## State Water Resources Control Board

November 28, 2016

Elizabeth Scheehle, Chief  
Oil & Gas and GHG Mitigation Branch  
Air Resources Board  
CalEPA Headquarters  
1001 I Street, 6th Floor  
Sacramento, CA 95814

**SUBJECT: EXTERNAL PEER REVIEW OF THE TEST PROCEDURE FOR DETERMINING ANNUAL FLASH EMISSION RATE OF METHANE FROM CRUDE OIL, CONDENSATE, AND PRODUCED WATER TANK AND SEPARATOR SYSTEMS**

Dear Ms. Scheehle:

This letter responds to the attached August 10, 2016 request for external scientific peer review for the subject noted above. The review process is described below. All steps were conducted in confidence. Reviewers' identities were not disclosed.

To begin the process for selecting reviewers, I contacted the University of California, Berkeley (University) and requested recommendations for candidates considered qualified to perform the assignment. This service is supported through an Interagency Agreement co-signed by CalEPA and the University. The University was provided with the August 10, 2016 request letter and attachments. No additional material was asked for. The University interviews each promising candidate.

Each candidate who was both qualified and available for the review period was asked to complete a Conflict of Interest (COI) Disclosure form and send it to me for review, with Curriculum Vitae. The cover letter for the COI form describes the context for COI concerns that must be taken into consideration when completing the form. "As noted, staff will use this information to evaluate whether a reasonable member of the public would have a serious concern about [the candidate's] ability to provide a neutral and objective review of the work product."

In subsequent letters to candidates approved as reviewers, I provided the attached January 7, 2009 Supplement to the CalEPA Peer Review Guidelines, which, in part, serves two purposes: a) it provides guidance to ensure confidentiality through the course of the external review, and b) it notes reviewers are under no obligation to discuss their comments with third-parties after reviews have been submitted. We recommend they do not. All outside parties are provided opportunities to address a proposed regulatory action, or potential basis for such, through a well-defined rulemaking process.

Later, I sent letters to reviewers to initiate the review. These letters provided access instructions to a secure FTP site where all material to be reviewed was placed; and a list of these documents. The first document was your August 10, 2016 letter of request for review to me. Its Attachment 2 was highlighted as the focus for the review. Each reviewer was asked to address each topic, as expertise allows, in the order given. Thirty days were provided for the review. I also asked reviewers to direct enquiring third-parties to me after they have submitted their reviews.

Reviewers' names, affiliations, curriculum vitae, initiating letters and reviews are being sent to you now with this letter. Where this response is provided electronically, all attachments can be accessed through the bookmark icon at the left of the screen.

Approved reviewers:

1. Joost De Gouw, Ph.D.  
Research Physicist  
Chemical Sciences Division  
NOAA Earth System Research Laboratory  
325 Broadway R/CSD7  
Boulder, CO 80305  
  
Telephone: 303-497-3878  
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2. Deepak Devegowda, Ph.D.  
Associate Professor,  
Mewbourne Chair in Petroleum Engineering  
Mewbourne School of Petroleum & Geological Engineering  
University of Oklahoma  
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3. Wayne D. Monnery, Ph.D.  
Adjunct Associate Professor  
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4. Albert Presto, Ph.D.  
Assistant Research Professor  
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If you have any questions, or require clarification from the reviewers, please contact me directly.

Regards,



Gerald W. Bowes, Ph.D.  
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Office of Research, Planning and Performance  
State Water Resources Control Board  
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Attachments:

- (1) August 10, 2016 Request by Elizabeth Scheehle for Scientific Peer Review
- (2) Letters to Reviewers Initiating the Review
  - (1) Joost De Gouw, Ph.D.
  - (2) Deepak Devegowda, Ph.D.
  - (3) Wayne D. Monnery, Ph.D.
  - (4) Albert Presto, Ph.D.
- (3) January 7, 2009 Supplement to Cal/EPA Peer Review Guidelines
- (4) Curriculum Vitae
  - (1) Joost De Gouw, Ph.D.
  - (2) Deepak Devegowda, Ph.D.
  - (3) Wayne D. Monnery, Ph.D.
  - (4) Albert Presto, Ph.D.
- (5) Reviews
  - (1) Joost De Gouw, Ph.D.
  - (2) Deepak Devegowda, Ph.D.
  - (3) Wayne D. Monnery, Ph.D.
  - (4) Albert Presto, Ph.D.

cc: Jim Nyarady, Manager  
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Tiffany Mateo  
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