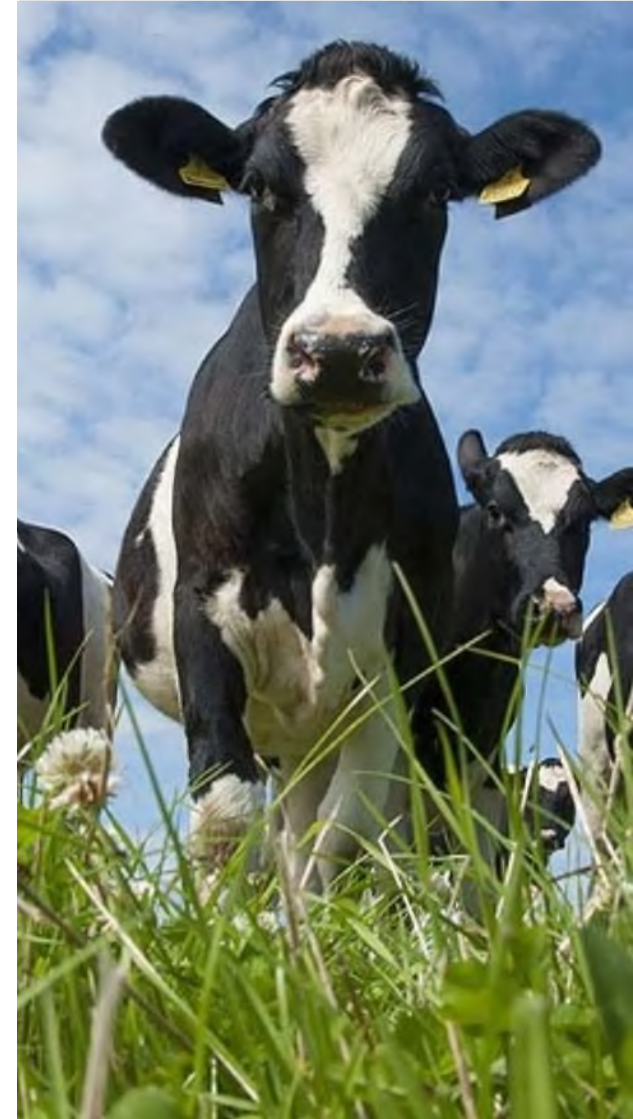


# RFI Process Update

## Dairy and Livestock Subgroup #3

May 14, 2018



# I. RFI for Dairy Research: Recap



## **Dairy and Livestock Subgroup #3 Request for Ideas Docket has Opened**

*California Air Resources Board sent this bulletin at 03/15/2018 06:07 PM PDT*

Having trouble viewing this email? [View it as a Web page.](#)



## **Request for Ideas (RFI) for Dairy Research**

### **Subgroup #3 (Research Needs, Including Enteric Fermentation)**

The Dairy and Livestock Subgroup #3 (Research Needs, Including Enteric Fermentation) is requesting RFI submissions to define research needs and knowledge shortfalls that can be addressed to facilitate the reduction of dairy and livestock methane emissions. All interested parties are invited to submit research ideas that can help California effectively achieve SB 1383 goal

RFI submissions will be pre-screened for completeness and appropriate content. Pre-screened submissions will be reviewed by Subgroup #3 committee members before they are drafted into a Dairy Air Research Prospectus. The completed prospectus will be used to provide recommendations for the most feasible research needed to address SB 1383 goals under each of the knowledge shortfalls identified previously by Subgroup #3.

Completed RFI Submission Forms are to be sent to [SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov). The deadline to submit is **May 31, 2018 at 5:00 pm (PDT)**.

Interested parties are encouraged to learn more about the RFI submission process by visiting the Subgroup #3 website.

Disclaimer: There are no intentions from any partners or affiliations in awarding a contract for funding based on RFI submissions, and participation in this RFI solicitation process does not translate to future funding, nor lack thereof.

# I. RFI for Dairy Research: Recap

## Submissions and Questions:

[SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov)

### Request for Ideas (RFI) Submission Docket



#### Guide to Completing an RFI Submission

- **Name and Contact Information:** This information is required for the RFI submission. Personal and organizational information will be used by the pre-screening committee to contact the submitter for any clarification needed on the RFI submission. Personally identifiable information will NOT be included in the Dairy Air Research Prospectus document.
- **Category:** Dairy and Livestock Subgroup #3 identified **four knowledge shortfalls and research needs** that will help California effectively achieve the goals of SB 1383. The RFI submissions must fall into one or more of the four categories listed in the submission form. This will allow the appropriate review committee to evaluate the RFI submission.
- **Research Title:** A concise title describing the content of the RFI submission.
- **Overview:** An overview of the proposed research. The overview should also answer the following questions:
  - What is the motivation behind this proposed research and why is it so important?
  - What questions will the proposed research answer?
  - What exactly is being studied?
  - What will be the approach/method used to conduct this research?
  - What are the expected results?
- **Limitations, Pitfalls, and Obstacles:** Description of problems that the research team(s) may have to overcome to get meaningful results (e.g., seasonal/diurnal variability, generalizability of results to other dairies, access to dairies, etc.) Please include potential solutions to any of these foreseeable issues.
- **Estimated Duration and Justification:** The time required for completing the research and a brief description of the justification for that timeframe (including any research preparation, data collection/analysis, and reporting).
- **Cost Estimate and Justification:** The estimated range of the cost required to conduct and complete the proposed research and the justification behind the cost figures (including any research preparation, data collection/analysis, and reporting).

**RFI Submission Form** →

Please send completed RFI Submission Forms to [SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov) by **May 31, 2018 at 5:00PM (PDT)**

For additional details on the RFI submission process, please refer to the following document:

[RFI Submission Guidelines](#)

### DAIRY AND LIVESTOCK SUBGROUP #3 RESEARCH NEEDS, INCLUDING ENTERIC FERMENTATION

#### Request for Ideas (RFI) Form

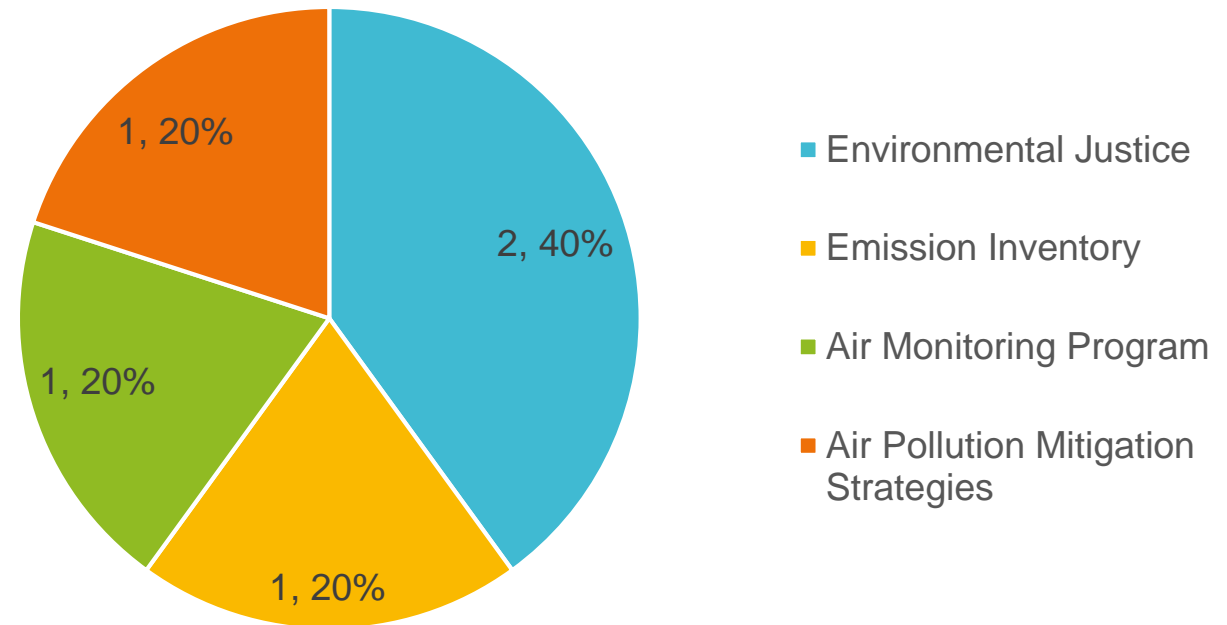
Participants are encouraged to read the supplementary document (RFI Submission Guidelines).

CONTACT INFORMATION	
Name:	Date:
Affiliation:	
Phone:	E-mail:
KNOWLEDGE SHORTFALL CATEGORIES	
Categories Under RFI Submission (check only those that apply):	
<input type="checkbox"/> Environmental Justice (Localized air pollution issues associated with dairies, particularly in disadvantaged communities)	
<input type="checkbox"/> Air Monitoring Programs (Long-term dairy GHG and air monitoring programs to track methane mitigation progress)	
<input type="checkbox"/> Emission Inventories (Using California-specific data)	
<input type="checkbox"/> Air Pollution Mitigation Strategies (Regional GHG and air quality modeling to evaluate short and long-term benefits of strategies)	
RFI CONTENT INFORMATION	
Research Title:	
Overview ( <i>limit to 1000 characters</i> ):	
Research Methodology ( <i>limit to 500 characters</i> ):	
Limitations, Obstacles and Pitfalls ( <i>limit to 500 characters</i> ):	
Estimated Duration/Timeline of Research ( <i>e.g. 10 months</i> ):	
How the Duration/Timeline of Research was estimated ( <i>limit to 500 characters</i> ):	
Estimated Cost of Research ( <i>e.g. \$400,000</i> ):	
How the Cost of Research was estimated ( <i>limit to 500 characters</i> ):	

Please fill out all sections of the form and email the complete document to [SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov) by **May 31<sup>st</sup>, 2018 at 5 PM PDT.**

## II. RFI Submission Update

Breakdown of the RFI Submissions



# III. Subgroup Webpage Update



## Dairy Research Knowledge Shortfalls New!

Subgroup #3 has identified four major knowledge shortfalls and research needs. They include:

1. Assess localized air pollution issues associated with dairies, especially in **environmental justice** communities.
2. Develop a long-term dairy GHG and air monitoring program to **track progress on reducing emissions**.
3. **Improve emission inventories** (e.g. methane, ammonia, etc.) using California-specific data.
4. Regional GHG and air quality modeling to **evaluate short and long-term benefits of air pollution mitigation strategies**.

## Additional Resources New!

California Dairy Greenhouse Gas and Air Quality Research: Summary

"Tasks and Timeline" Subgroup #3 Presentation: RFI Development

## Request for Ideas (RFI) Process New!

The Dairy and Livestock Subgroup #3 (Research Needs, Including Enteric Fermentation) has sent out a call for RFI submissions to [SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov) where all potential contributors from academia, industry, government and the public can submit various research ideas that can help California achieve SB 1383 goals while addressing the knowledge shortfalls and research needs as identified by the subgroup. Participants must use the **RFI Submission Form**. Further details on the RFI solicitation process can be found on **RFI Submission Guideline Document** or the RFI Submission webpage link below. **The deadline to submit is May 31, 2018 at 5:00PM (PDT).**

# III. Subgroup Webpage Update



## Guide to Completing an RFI Submission

- **Name and Contact Information:** This information is required for the RFI submission. Personal and organizational information will be used by the pre-screening committee to contact the submitter for any clarification needed on the RFI submission. Personally identifiable information will NOT be included in the Dairy Air Research Prospectus document.
- **Category:** Dairy and Livestock Subgroup #3 identified [four knowledge shortfalls and research needs](#) that will help California effectively achieve the goals of SB 1383. The RFI submissions must fall into one or more of the four categories listed in the submission form. This will allow the appropriate review committee to evaluate the RFI submission.
- **Research Title:** A concise title describing the content of the RFI submission.
- **Overview:** An overview of the proposed research. The overview should also answer the following questions:
  - What is the motivation behind this proposed research and why is it so important?
  - What questions will the proposed research answer?
  - What exactly is being studied?
  - What will be the approach/method used to conduct this research?
  - What are the expected results?
- **Limitations, Pitfalls, and Obstacles:** Description of problems that the research team(s) may have to overcome to get meaningful results (e.g., seasonal/diurnal variability, generalizability of results to other dairies, access to dairies, etc.) Please include potential solutions to any of these foreseeable issues.
- **Estimated Duration and Justification:** The time required for completing the research and a brief description of the justification for that timeframe (including any research preparation, data collection/analysis, and reporting).
- **Cost Estimate and Justification:** The estimated range of the cost required to conduct and complete the proposed research and the justification behind the cost figures (including any research preparation, data collection/analysis, and reporting).

## References and Additional Information New!

[California Air Resources Board: Agriculture-Related Activities](#)

[California Air Resources Board: Research Division Work on Dairy Research](#)

# IV. Follow-up Discussion on RFI Submission Evaluation Criteria (Options and Strategies)



RFI Evaluation Criteria
<p><b>Category: Environmental Impacts</b></p> <ul style="list-style-type: none"> <li>• <b>Methane emission:</b> Clearly communicates methane centric research need for the proposed research, including but not limited to reduction and mitigation strategies, inventory, and air monitoring</li> <li>• <b>Air quality assessment:</b> Considers and explores potential air quality benefits and dis-benefits of dairy methane emission reduction and mitigation</li> <li>• <b>Water quality assessment:</b> Considers potential water quality impacts in the region</li> <li>• <b>Variability:</b> Evaluates the potential variability and uncertainties of dairy air emissions and their impacts</li> <li>• <b>Environmental justice:</b> Addresses potential environmental justice concerns</li> </ul>
<p><b>Category: Industry Impacts</b></p> <ul style="list-style-type: none"> <li>• <b>Dairy co-benefit and economics:</b> Carefully considers the productivity, operational cost, and capital cost for dairy operations in the context of this submission</li> <li>• <b>Information sharing and engagement:</b> Ensures effective communication, transparency, and collaboration amongst industry, government agencies, and non-governmental organizations</li> <li>• <b>Reasonable solutions:</b> Considers solutions for dairy methane emission reduction that are accessible and cost/time-effective</li> <li>• <b>Practical considerations:</b> Considers non-disruptive options or alternatives for research and evaluation of dairy operations</li> </ul>
<p><b>Category: Policies/Regulations/Programs</b></p> <ul style="list-style-type: none"> <li>• <b>SB 1383:</b> Ensures that the methane emission reduction objectives are well aligned with the legislative mandate</li> <li>• <b>Existing rules/regulations/programs:</b> Considers dairy related local/district/state rules, regulations, and programs that have implications for climate change and air quality (e.g., incentive programs)</li> <li>• <b>Methane emission reduction and mitigation:</b> Considers effective dairy methane emission reduction and mitigation in the context of both air quality and dairy productivity, including proven and or new/innovative strategies that holds demonstrated promise</li> </ul>
<p><b>Category: Feasibility</b></p> <ul style="list-style-type: none"> <li>• <b>Methodology:</b> Clear and concise description of research methods with consideration for its accessibility, affordability, and scientific acceptance</li> <li>• <b>Cost and Time:</b> Reasonable and justified investments</li> <li>• <b>Overcoming problems:</b> Fall back strategies are considered to ensure that the objective(s) of the research is/are satisfied despite any potential shortfalls</li> <li>• <b>Overall impact:</b> Holistically considers all of the evaluation criteria and its general feasibility for achieving the goals of SB 1383, air quality improvements, etc.</li> </ul>

## IV. Follow-up Discussion on RFI Submission Evaluation Criteria (Options and Strategies)



	Option 1	Option 2	Option 3
# of RFI Submissions	< 20	>= 20 and < 40	>= 40
# of Group(s)	1	2	3
# of Members in each group	12	6	4



# V. Overview of RFI Survey



## Subgroup #3 RFI Evaluation Process



### Information Page

The information you enter in this page will direct you to the appropriate Dairy and Livestock Subgroup #3 RFI Evaluation Survey pages.

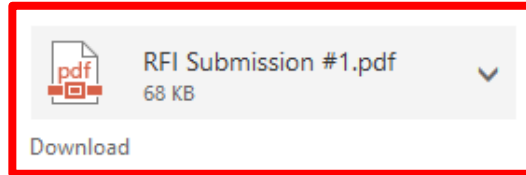
\* Which RFI Reviewer are you?


\* Please enter the RFI Submission Number (e.g., 2):

\* Which category best describes this RFI submission?

- Environmental Justice** (assessing local air quality issues)
- Air Monitoring Programs** (quantifying on-farm air emissions and tracking reduction progresses)
- Emission Inventory** (improvement using California-specific data)
- Air Pollution Mitigation Strategies** (evaluation of short- and long-term air quality benefits)

## V. Overview of RFI Survey



 | Action Items

Dear Dairy and Livestock Subgroup #3 Committee,

Attached is a RFI submission that passed the RFI Completeness Review:

**Title:** Evaluate dairy air emissions near EJ communities

**Submission #:** 1

**Knowledge shortfall category:** Environmental Justice

Please use the following survey to evaluate the RFI submission: [SURVEY](#)

RFI Submission Evaluation Guideline can be found [here](#). Please let us know if you have any questions about the evaluation process.

Thank you for taking the time to conduct the evaluation!

Best regards,  
RFI Completeness Review Team

# Questions on RFI Process



## RFI Submission Process:

Longwen (Owen) Gong  
Research Division  
California Air Resources Board  
[longwen.gong@arb.ca.gov](mailto:longwen.gong@arb.ca.gov)

## RFI Submission Web Support:

Joshua Kim  
Industrial Strategies Division  
California Air Resources Board  
[Joshua.kim@arb.ca.gov](mailto:Joshua.kim@arb.ca.gov)

## RFI Submission Review Process:

Toshihiro Kuwayama  
Research Division  
California Air Resources Board  
[toshihiro.kuwayama@arb.ca.gov](mailto:toshihiro.kuwayama@arb.ca.gov)

# Completing Dairy Air Research Prospectus

