

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (Department)**  
**FERTILIZER INSPECTION ADVISORY BOARD (FIAB)**  
**WEB CONFERENCE MEETING**

**June 10, 2021**  
**9:00 AM – 12:00 PM**

**MINUTES**

**MEMBERS PRESENT**

Chris Gallo  
David McEuen  
Gary Silveria, Vice Chair  
Greg Cunningham  
Jake Evans  
Melissa McQueen, Chair  
Timothy Howard

**MEMBERS ABSENT**

Miguel Duarte

**CDFA STAFF**

Amadou Ba  
Angelia Johnson  
Barzin Moradi  
Brittnie Williams  
Elizabeth Moseby  
Emad Jahanzad  
Evelyne Ndiaye  
Haig Baghdassarian  
Kris Gulliver  
Maria Tenorio Alfred  
Mark Cady  
Martin Burger  
Maryam Khosravifard  
Natalie Jacuzzi  
Natalie Krout-Greenberg  
Nick Young  
Nicole Smith  
Stacy Aylesworth

**INTERESTED PARTIES**

Parry Klassen  
Renee Pinel

**INTRODUCTIONS AND ANNOUNCEMENTS**

Melissa McQueen, Chair, called the meeting to order at 9:07 am. Roll was called, introductions were made, and a quorum was established.

Chair McQueen informed the FIAB about the resignation of Ed Needham from the FIAB. Additionally, Jake Evans and Greg Cunningham's terms will expire on October 14, 2021. Therefore, there will be three vacant positions that will need to be filled. Chair McQueen welcomed Evans and Cunningham to reapply.

Dr. Amadou Ba introduced Haig Baghdassarian who was appointed as Deputy Secretary and Chief Counsel to the Department's Legal Office.

**APPROVE FEBRUARY 11, 2021, MEETING MINUTES**

Chair McQueen requested the board review the minutes from the February 11, 2021 FIAB meeting.

**MOTION:** Gary Silveria moved to approve the February 11, 2021 meeting minutes as written. Tim Howard seconded. The motion passed unanimously by all board members present with a vote of 7 to 0.

### **DEPARTMENT / DIVISION / BRANCH UPDATES**

Natalie Krout-Greenberg reported that Jenny Lester Moffitt, the Department's Undersecretary, will be appointed as Undersecretary of the United States Department of Agriculture's (USDA) Marketing and Regulatory Programs. Lester Moffitt is awaiting formal appointment before leaving California State service.

The Governor's May Revise Budget for California proposed several millions of dollars to the Department's Farm to Fork programs as follows: \$30 million to the Office of Farm to Fork's Farm to School Program; \$15 million to the California Nutrition Incentive Program (CNIP); \$20 million for the Healthy Refrigeration Grant Program; and \$12.5 million for the Urban Agriculture Program. The money will be distributed through grants and requires collaboration and support, including round table discussions with stakeholders to support California-grown products.

The Inspection Services Division (ISD) is reducing its leased office space, which will require the Gateway Oaks staff to relocate. A cost savings is anticipated once the new office location and consolidation is complete. New site considerations must be approved by the Department of General Services (DGS). The move will occur around Fall 2021.

The Food and Drug Administration's (FDA) investigative report regarding the salmonella outbreak in red onions was recently issued and placed a focus on adjacent land use activities. Discussions on adjacent land use continues to be a part of the California Agricultural Neighbors Dialogue group, an effort led by the Monterey County Farm Bureau and CDFA.

The California Agricultural Neighbors Work Group is focused in the Salinas Valley and represents local farmers, ranchers, compost entities, viticulture entities, local, state, and federal government officials, industry members who represent agricultural associations, and retail and consumer groups. An interim workgroup report will be issued on June 23, 2021.

Dr. Amadou Ba provided staff updates. Maria Tenorio Alfred returned to the Feed, Fertilizer, and Livestock Drugs Regulatory Services Branch (FFLDRS) as a Research Data Specialist II to fill Gary Castro's position, who had retired. Kelly Mammen, Environmental Scientist, will be filling the Feed/Antimicrobial Use and Stewardship (AUS) vacancy in Southern California who is currently a Livestock Inspector with the Animal Health Branch. Kathryn Coke, Environmental Scientist, with the Fertilizing Materials Inspection Program (FMIP), left the program; it will take approximately six months to advertise and fill this position. Jason Cho, Office Technician, and Julia Garcia, Agricultural Technician II, also left FFLDRS.

Two programs in ISD were audited: the FMIP and the Shipping Point Inspection (SPI) Program. The audit looked at fiscal year (FY) 2019/2020 check payments received. There was a flow of \$6.9 million for the FMIP. There were no major issues, but there was some misplacement of checks and payments between Financial Services and the program. The misplacement of the payments was corrected, and all payments were applied correctly. SPI had \$14.4 million flow through Financial Services, also with no major issues. Any misplacements of payments from checks was corrected and the payments were applied to the correct accounts.

At the February 11, 2021 FIAB meeting, Silveria recommended exploring and identifying funds for the Fertilizer Research Education Program (FREP). Dr. Ba stated that there are two grant applications and proposals currently being written. The Conservation Innovation Grant (CIG) allows entities to apply for up to two million dollars; however, the grants are highly competitive. The deadline for proposals is July 19, 2021. FREP is also applying for a USDA Specialty Crop Block Grant (SCBG) in the amount of \$750,000. The deadline is June 24, 2021, so staff are actively engaged in writing grant proposals.

Krout-Greenberg and Dr. Ba have been studying the issue presented with perfluoralkyl and polyfluoralkyl substances (PFAS). These manmade chemicals are found in biosolids and the substances have a negative effect on the environment. Other state agencies such as the State Water Resources Board (SWRB), Department of Pesticide Regulation (DPR), CalRecycle, and California Environmental Protection Agency (EPA) are also studying emerging data.

### **FUND CONDITION / MILL ASSESSMENT**

Dr. Ba reported that as of July 1, 2020, the beginning combined balance for the Commercial Fertilizer and Organic Input Materials (OIM) programs was \$12,769,447; total revenue was \$5,719,717; expenditures were \$5,119,168 and encumbrances were \$348,355. The adjusted balance as of March 31, 2021, was \$13,021,641.

The FREP beginning balance of July 1, 2020, was \$6,192,899; revenue was \$2,520,959; expenditures were \$1,721,116; and encumbrances through June were \$2,006,453. The adjusted balance as of March 31, 2021, was \$4,986,289. Also discussed, but not included in the totals, were future encumbrances from FY 2021/22 through FY 2023/24, which totaled \$2,678,240.

Mill Assessments in July, August, and September of 2020 were assessed at .003. The following months were assessed at .0025. Total mill assessment revenue from July 1, 2020 through April 30, 2021, was \$7,366,111.

Per Chair McQueen, projections of fertilizer sales and use will remain in high demand and prices will stay relatively the same. If the FIAB wants to recommend adjustments, members need to consider that it could take up to one year to implement the changes.

Dr. Ba also asked if the drought would impact the fertilizer industry. McQueen stated that fields are being fallowed and trees are being taken out. Silveria stated that for rice sales, fertilizer needs have declined between 20 to 40 percent. Howard noted that growers are using less phosphates on plants and expectations for yield are lower.

### **PROGRAM UPDATES**

Dr. Martin Burger presented an update on the numbers of labels registered as of May 7, 2021. The total of OIM label registrations was 3,184 and conventional label registrations totaled 10,001.

Dr. Burger presented a comparison of registration renewals and new applications for the periods of April 2019 - March 2020, and April 2020 - March 2021. In 2019 - 2020, conventional fertilizer had 1,270 new applications and 3,930 renewals, compared to 1,215 new applications and 2,594 renewals in 2020 - 2021. In 2019 - 2020, OIM had 528 new applications and 938 renewals, compared to 450 new applications and 1,001 renewals in 2020 - 2021. It was noted that groups required to renew in the two periods were not similar in size. Approval times varied from 30 days to over 120 days. Applications take longer to process when firms are required to adjust their applications. Even with COVID-19 protocols in place, the processing times were similar from April 2019 - March 2020, to April 2020 - March 2021.

Dr. Burger suggested that the program should consider bringing on two more Environmental Scientists soon to improve turnaround time. Chair McQueen noted that processing times for applications have greatly improved from a few years ago.

Mark Cady reported on the grant cycle. The three priority areas for research are: improving fertilizer input management, with a focus on education; understanding soil and plant processes, with a focus on the science and how it works; and understanding loss pathways to address how nutrients become lost from the system.

A FREP and Western Plant Health (WPH) co-hosted conference will be held in-person in San Luis Obispo on October 27 - 28, 2021, with the possibility of a tour of Cal Poly on October 26, 2021. Certified Crop Advisor (CCA) credits are available for attendees.

Cady reported on FREP project development. At the last board meeting, FREP presented two project proposals to address water quality compliance issues. A motion was made for FREP to provide additional information on water quality coalitions and to present a revised proposal. Cady stated that FREP's intent is to spend its reserves to help growers face the enormous challenges associated with water quality regulation compliance. There is a need for growers to quickly improve nitrogen management. It is a very challenging development for nitrogen fertilizer use because of the threat to California farms, especially in the Central Valley, Central Coast, and South Coast. Regulations developed by the water boards require growers to reduce the amount of nitrogen fertilizers applied in their field because of the assumption that excess nitrogen is leaching into groundwater. Water board regulations for excess nitrogen reductions

over the next several years threaten the economic sustainability of many farming operations.

FREP wants to address the problem robustly and contract with University of California (UC) to hire field staff to be stationed in counties where they will work with growers to identify needs and help them comply with water quality mandates. Conversations with UC have led to the determination that Staff Research Associates (SRAs) will be the most viable position for scientific field work, communicating with growers and coalitions. The FIAB had previously suggested that Department staff explore outside funding opportunities. Cady stated that the FREP intends to apply for federal funds, although the funds are not guaranteed because the grant programs are very competitive.

Another resource would be partnering with coalitions. Dr. Ba and Cady have spent time over the past couple of months speaking with coalition leads and soliciting input to assess grower needs. They met with coalition staff from the Central Valley and with the Monterey County Farm Bureau. They met with the Farm Bureau from the Central Coast because at this time there is no coalition there. All coalition representatives endorsed working with the UC. UC has resources and expertise for working with the local populations. The job description would be to collaborate with coalitions and bring as many university resources as possible to the coalitions. Coalitions are tasked with identifying outliers who are applying more nitrogen products than their neighbors.

Parry Klassen, Executive Director of the East San Joaquin Water Quality Coalition, reviewed integrated pest management. Klassen stated full support of the FREP proposal and connected the information on integrated pest management to explain why a partnership with coalitions, UC, and FREP will be an effective and successful tool for managing nitrogen use.

Klassen stated the numbers show that most farmers are overusing nitrogen; Klassen presented a graph on nitrogen fertilizer applications on pistachio trees to show how outliers are applying more than twice as much nitrogen than what is needed. This shows an urgent need to support growers in their compliance efforts. An important communication framework to work with growers will be the '4Rs' approach for crop nutrition: right source, right rate, right time, and right place. Klassen advocated for UC to assist with grower outreach and education since they are a credible source.

Chair McQueen opened the discussion to board members.

Evans asked about the purpose of the University and FREP outreach, whether it is to educate or to improve soil health. Cady replied that it is on a county by county basis. Getting staff in the field to respond to local needs is the initial goal. UC staff will address the most pressing problems and find the most expedient practices to reduce nitrogen loading.

Cady stated that growers in the Central Coast rely on University of California Cooperative Extension Advisor, Michael Cahn's research and demonstrations, but there is not enough staff to help as much as needed. Central Coast growers need to make irrigation efficiency improvements quickly and address the fastest way to make progress in the field.

Evans commented that a two-prong or three-prong approach in soil management may be beneficial to make the needed changes to get key nutrients in the soil and improve soil health without leaching nitrogen. Evans expressed support for the project.

Klassen stated that irrigation and fertigation are related. For example, fertilizing at the end of the irrigation cycle would keep more nutrients in the root system rather than fertilizing at the beginning of the cycle, which would wash away into the ground water.

Chair McQueen asked Cady if FREP has a specific proposal that includes the costs and the timeline. Cady replied that Doug Parker of the UC Cooperative Extension estimated that it would cost approximately \$3.2 million over three to four years for five specialists to be in the field to advise farmers. The UC Cooperative Extension is working to create a structure for management, while collaborating with FREP. The program would be evaluated over time and metrics would be developed to assess its progress.

Silveria stated outcomes and expectations need to be outlined before moving forward with a motion to support the project. Cady replied that the objectives need to be created based on the developing conceptual framework and would be created with collaboration of UC, cooperative extensions, coalitions, and the Department.

Haig Baghdassarian, on behalf of Secretary Karen Ross, expressed appreciation of FREP's continued work to address these urgent issues, noting that this is an important issue to the Department and the Secretary. Baghdassarian also acknowledged Klassen and expressed appreciation for the clarification of problems stemming from nitrogen overload.

Renee Pinel stated that industry supports educating growers to improve practices. However, the question is whether funding will achieve the intention of the project. Pinel stated that there needs to be mechanisms in place to be sure growers who need the education are getting it. Pinel suggested that the first year be a pilot project with two to three coalitions partaking. After the first year, a report to the board regarding progress could determine next steps. Pinel further stated that the proposal should include an outline demonstrating how growers are getting the information and needed resources.

Klassen clarified that outlier parcel representatives are mandated to go to meetings and fill out implementation reports. They have to document improvement or they are referred to the water board for enforcement.

Cady stated that in an effort to prioritize areas for project activities, Dr. Ba and Cady looked at where nitrates are highest in aquifers. Every farm is unique with specific challenges for fertilizer and irrigation management. Dr. Ba stated there was no resistance from coalition representatives and quite a lot of acceptance for getting help with member outreach and training. There is an openness to be mentored by UC system staff and to use the UC system to network with others. FREP is submitting proposals for the national CIG and the SCBG, and matching funds are required.

Chris Gallo stated a desire to know what is the ask, what is the cost, and what are the coalitions' highest needs. He also requested to review data on water quality coalitions with the most outliers if it is available. Cady replied stating there are maps that show the wells contaminated with nitrates. The highest priority area in the Central Coast due to nitrates is the Salinas Valley. Cady noted there is a need for willing operators. Not every coalition has been contacted, only the coalitions in the most vulnerable areas. UC has the capacity to be efficient with funds and focus on nutrient management. Prioritizing counties to work in will require examining the combination of the capacity of coalitions and the intensity of the challenges of mitigating contamination of groundwater. The project will evolve as each of the stakeholders begin sharing needs of nitrogen management.

Cunningham expressed support for funding the project if it is a very high priority, even though a lot of information and details are not available. Cunningham stated that benchmarks need to be in place and funds should be released in phases, instead of a one-time, up-front release. That would ensure funds would be available if an emergency arises and funds are needed elsewhere.

Tim Howard stated the oral presentation was informative, but hard information is needed for the FIAB to be able to understand the project more clearly because there is a lack of specificity. Howard stated that back and forth discussion is not solid enough to move forward to approve funding and requested a written plan.

Chair McQueen stated the FIAB is supportive of the concept, but needs a written proposal with the specifics before it is recommended by the board.

Ordinarily, the next board meeting would be in September 2021, but to ensure the FIAB is able to review the written proposal before the grant proposal deadlines, a meeting was scheduled for July 1, 2021, and FREP will provide the written proposal to the FIAB by June 24, 2021 to ensure sufficient review time.

Baghdassarian suggested that after reviewing the proposal, questions could be sent to FREP staff prior to the meeting to facilitate having answers ready for the July 1, 2021, meeting.

Dr. Burger presented an update on lime score labeling and reported that the working group is not proposing a new regulation in the immediate future but has made good

progress. In mid-May 2021, Dr. Burger did a comprehensive literature review and data review on appropriate scoring methods. Most of the data is old, from the 1950s and earlier. The data did not evaluate soil type and the studies were not in California. Most states look at calcium carbonate equivalents and fineness. Oregon also uses moisture. Dr. Burger will look at additional data from Oregon to look at moisture, sieve, and fineness factors that have been found. Other factors require looking at soil type, soil pH, and pelletized lime. The working group is making progress, everyone attends and contributes; however, establishing regulations is tabled for now.

Nick Young presented board members with proposed new rulemaking changes before the public notice is released, which is due three to five months prior to change. The focus of the rulemaking change was to clarify language in Title 3 of the California Code of Regulations (3 CCR). Young went through proposed changes to each regulation, explaining that the underlined sections in the materials denoted new proposals, and the language with no underline is existing language. Young explained the reasons for each change.

Cunningham recommended changing the word “shall” in 3 CCR Section 2309(a) to “may”.

Young replied that there is no guarantee for phosphorous because it is processed in the soil by microbes and goes from phosphite to phosphate, so totals cannot be guaranteed. When the language in the rulemaking goes public, the Department will look at the comments and recommendations for rulemaking decisions. In the past, changes have been made to the language because of public comment.

Evans was concerned about 3 CCR Section 2330.2 (b)(2)(A) regarding address changes on OIM labels and wanted an explanation as to why the firm would only receive a warning and not a penalty if the Department is not notified of an address change. The reason for the penalty is to prevent a manufacturer from having a separate address where fertilizers could be adulterated.

Young clarified that the address change regulation is directed toward documentation errors that are correctable and would only necessitate a notice of warning. However, if the firm has intentionally not reported an address change, penalties may be applied, products are liable to quarantine, and licenses can be revoked. When it is a documentation situation, the Department’s action needs to be fair for the business. With the board member’s recommendation, Young stated the team would discuss this change to reevaluate if revisions are needed.

Young reported on the Association of American Plant Food Control Officials (AAPFCO) September 2020 meeting. An AAPFCO study is evaluating the 15 percent rule in regulations on slow release N (nitrogen), P (phosphorous), K (potash) substances throughout the United States. There are questions about the origins of 15 percent and if there is scientific data to support or change the 15 percent threshold. Young will be sending the FIAB members a scope of work for background information as well as a letter from the board of directors requesting assistance in funding the study. The board of directors is hopeful that California can help provide the funding because California is in a better position financially than many other states.

### **ELECTION OF CHAIRPERSON OF THE FIAB**

Chair McQueen thanked the board for the opportunity to be the chairperson the last few years. The opening to chair was offered to any nominees or volunteers to take the role as chairperson. Silveria stated an interest; but noted Chair McQueen is doing a great job and would like Chair McQueen to be able to see current topics and interests through to completion. No one volunteered or was nominated, so Chair McQueen agreed to remain the FIAB chairperson. Members were polled and no one objected.

### **CENTER FOR ANALYTICAL CHEMISTRY (CAC) LAB UPDATE**

Maryam Khosravifard gave details of assay turnaround times. From January 1, 2021, to April 30, 2021, 1,171 assays were completed in an average of seven business days. From a total of 354 samples received, 275 were completed through the end of April; and 11 of those samples were labeled rush or priority.

Khosravifard reported on CAC accomplishments that include implementing a modified  $P_2O_5/K_2O$  method on newer equipment called ICP-OES, which is being evaluated for use in organic sample assays. Meetings and continuing work have remained consistent even with COVID-19 protocols and retirements. CAC is also adding heavy metal assays to see if lower numbers can be used with the new consolidation of methods. Compared with AAPFCO, California standards are more stringent for analyzing heavy minerals. The methods were originally developed at the University of Kentucky. Evaluating with the ICP-OES method is more robust and could be more accurate for sulfur and mineral analysis than the combustion method.

Alternative methods for gypsum analysis explored thermogravimetric methods using a limited number of samples. This was to determine calcium sulfate dihydrates vs. the anhydrite forms. The desire is to explore with more samples that are reflective of gypsum and blended fertilizer materials to see if the method is viable. X-ray diffraction (XRD) methods are also being used for studies in determining calcium sulfate dihydrate vs. anhydrite. CAC and the fertilizer program will do a series of studies that incorporates both methods for viable alternatives for gypsum analysis. This will help in discovering if a substance is a blend but not listed as a blend.

**PUBLIC COMMENT**

No public comments were made.

**AGENDA ITEMS FOR JULY 1, 2021 MEETING**

-FREP Nitrogen and Irrigation Management Outreach Initiative Proposal.

**AGENDA ITEMS FOR SEPTEMBER 2021 MEETING**

- Request to tour lab
- AAPFCO Proposal for slow release
- Status of nitrogen and irrigation management outreach initiative
- Board vacancy recommendations

**NEXT MEETING**

The next FIAB meeting will be on July 1, 2021 to discuss FREP Nitrogen and Irrigation Management Outreach Initiative Proposal. The next regular FIAB meeting will be on September 29, 2021.

**MOTION:** Greg Cunningham moved to adjourn the meeting; David McEuen seconded. The motion passed unanimously by all board members present with a vote of 7 to 0.

Chair McQueen adjourned the meeting at 12:35 pm.

Respectfully submitted by:

**ORIGINAL SIGNED BY**

Nick Young  
Environmental Program Manager I  
Fertilizing Materials Inspection Program

06/10/2021

**Date**