

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

**February 11, 2021
9:00 a.m. – 12:00 p.m.**

MINUTES

MEMBERS

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

MEMBERS ABSENT

Ed Needham

CDFA

Adriana Avalos
Angelia Johnson
Amadou Ba
Barzin Moradi
Brittnie Williams
Carla Sanchez
Julia Garcia
Kathy Diaz
Kevin Schnepf
Kris Gulliver
Lance Simmons
Mark Cady
Martin Burger
Maryam Khosravifard
Natalie Jacuzzi
Natalie Krout-Greenberg
Nick Young
Nicole Smith
Sadia Naseem
Stacy Aylesworth
Wei Wu

INTERESTED PARTIES

Brandon Richards
Laura Brown
Rebekah Finn
Renee Pinel

INTRODUCTIONS AND ANNOUNCEMENTS

Melissa McQueen, Chair, called the meeting to order at 9:04 a.m. Self-introductions were made, and a quorum was present. Ed Needham was absent.

Chair McQueen welcomed new board members Dr. Miguel Duarte and Timothy Howard to the board.

Dr. Amadou Ba announced Nick Young as the newly appointed Environmental Program Manager I for the Fertilizing Materials Inspection Program (FMIP).

APPROVE SEPTEMBER 29, 2020, MEETING MINUTES

Chair McQueen requested the board review the minutes from the September 29, 2020, FIAB meeting.

MOTION: Greg Cunningham moved to approve the minutes; Chris Gallo seconded. The motion passed unanimously by all board members present with a vote of 8 to 0.

DEPARTMENT / DIVISION / BRANCH UPDATES

Natalie Krout-Greenberg reported agricultural workers are prioritized in Phase 1B Tier 1 of the COVID-19 vaccine rollout. Governor Gavin Newsom's My Turn is a new system for Californians to learn when they are eligible to be vaccinated and schedule a vaccination appointment when eligible, as well as a mechanism to easily track vaccination data. The Department's website is continuously updated as a resource for timely information regarding COVID-19 and vaccination protocols.

Krout-Greenberg announced the Department's continued involvement with the California Department of Public Health in addressing foodborne illness outbreaks and follow up to prevent future outbreaks. No definitive data has shown the cause or source of the recent outbreaks; however, the Food and Drug Administration report of a sample of findings on adjacent lands led the Department to stand up a longitudinal study looking at private and public lands and pathogen movement through the environment. The Department is also meeting with California agriculture neighbors in the Salinas Valley to understand common seasonal practices and best practices in place.

The application period for the Farm to School Grant Program ends February 16, 2021. The grant is focused on bringing healthy nutritious foods into school lunchrooms. The Farm to School virtual conference is March 10 – 12, 2021 showcasing efforts of the Division's Office of Farm to Fork Farm to School Program.

Dr. Ba reported that the Feed, Fertilizer, and Livestock Drugs Regulatory Services (FFLDRS) Branch continues to adapt to the transition of teleworking. The Department's Office of Information Technology has provided staff with a Virtual Private Network (VPN) connection allowing staff access to Department files at home. The transition of the Feed program's lab services from the Department's Center for Analytical Chemistry (CAC) to the University of California, Davis labs has gone smoothly; a few sample analyses will remain at CAC. Dr. Ba announced that the Department's Audit Office is conducting a cashier and revenue audit in the Financial Services Branch (FSB). The purpose of the audit is to identify the errors of checks not being sent to the appropriate program and get recommendations to prevent these errors from occurring. FFLDRS determined FMIP was suitable for the Audit Office to highlight potential deficiencies within FSB cashier's workflow and volunteered FMIP to be audited. The audit does not have an impact on FMIP.

Dr. Ba announced that the fertilizer registration renewal cycle started January 1, 2021 for conventional fertilizer and Organic Input Material (OIM) products with firm names that begin with letters 'D' through 'I'.

The Fertilizer Research and Education Program (FREP) appointed Jennifer Harmon, former staff for the Livestock Drugs Program, to an Associate Governmental Program Analyst.

FUND CONDITION / MILL ASSESSMENT

Dr. Ba reported that as of June 30, 2020, the beginning balance combined total for the Commercial Fertilizer and OIM programs was about \$11.4 million; total revenue was about \$7.2 million; expenditures were about \$5.9 million; and encumbrances were \$480,315, with an adjusted balance of about \$12.2 million. As of September 30, 2020, the beginning balance combined total for the Commercial Fertilizer and OIM programs was about \$12.7 million; total revenue was about \$2.5 million; expenditures were about \$1.8 million; and encumbrances were \$261,566, with an adjusted balance of about \$13.1 million.

As of June 30, 2020, the beginning balance for the Fertilizer Research and Education Program (FREP) was about \$5.1 million; revenue was about \$2.8 million; expenditures were about \$1.7 million; and encumbrances through June 30, 2020, were about \$464,225, with a total adjusted balance of about \$5.7 million. As of September 30, 2020, the beginning balance for FREP was about \$6.2 million; revenue was about \$725,538; expenditures were about \$522,212; and encumbrances through June 30, 2020, were about \$2.4 million, with a total adjusted balance of about \$4.0 million.

Dr. Ba reported that the current Fiscal Year 2020/21 mill assessment total to date is about \$4.9 million.

PROGRAM UPDATES

Mark Cady stated the agricultural industry could face significant restrictions on fertilizer use due to emerging water quality regulations. Cady presented updates on the Irrigated Lands Regulatory Program (ILRP) and Central Valley Salinity Alternatives for Long Term Sustainability (CV-SALTS), two important regulatory programs regarding nitrate in groundwater.

The ILRP's East San Joaquin Waste Discharge Requirements (WDR) were adopted by the Central Valley Regional Water Quality Control Board in 2012. This regulatory package was petitioned to the State Water Board, and amended by that board in 2018. The State Board rewrote the requirements stating that some of the rewritten requirements are precedential for statewide regional boards. The important part of the requirements for FREP is the nitrogen (N) application reporting by growers and the N removed from fields with harvested crops. The Central Valley Water Board will promulgate groundwater protection formulas, values, and targets utilizing grower reported nitrogen usedata. Through this process the grower coalitions and water boards will determine the maximum quantities of nitrogen that can be discharge to groundwater. The formulas and values will result from modeling of N being applied and removed from cropland and will determine if the excess will result in exceedance of the groundwater quality standards. The groundwater values and targets will determine potential future restrictions on fertilizer management in the Central Valley.

The Central Coast Regional Water Quality Control Board revised a draft WDR that was released at the end of January; it proposes hard limits on N fertilizer application and

long term limits on excess N set at 50 pounds N per acre. Cady presented a graph provided by the Central Coast Regional Water Board in 2019, illustrating the number of acres versus the current annual N applied minus N removed, showing proposed excess N limits. Cady stated given the status quo, 81 percent of cropped acres would achieve the first benchmark of 500 pounds per acre of excess N, but only six percent of acres are achieving the 50 pounds N per acre limit proposed to be in effect in 2050.

Cady presented a regulatory review of the CV-SALTS focusing on groundwater nitrate in impacted areas including the Tulare Lake Basin, the East San Joaquin River Basin, and other areas. CV-SALTS means increased costs for the agriculture industry. Grower fees to coalitions will increase as they move through the three goals of the Salt and Nitrate Control Program adopted in 2019: provide safe drinking water supplies including Early Action Plans, reduce nitrate impacts to water supplies through the development of Management Zones, and restore groundwater quality where reasonable and feasible.

FREP's goal is to help address regulatory issues considering the best tools available for growers, including those developed through FREP funding. FREP supports education and training of growers, consultants, and Certified Crop Advisor (CCA) to enable them to certify Water Board required Nitrogen Management Plans. Since 2013 FREP has provided CCA training for over 1,000 individuals at a cost of \$471,310. The CCA training is transitioning to a California N Specialization by the International CCA organization. FREP has provided Grower Training for over 4,000 individuals to self certify Irrigation and Nitrogen Management Plans through the Department at a cost of \$455,395. This training is ongoing and is now managed by FREP. FREP's investments responding to the regulatory requirements in providing tools for growers include project areas such as Pump and Fertilize, a Special Request for Proposals for N removed at harvest in Central Coast Crops, N harvest removal in Central Valley Crops, and Crop Manage.

Cady stated FREP's authority is based on the Food and Agricultural Code (FAC), highlighting the one mill (\$0.001) is to provide funding for research and education regarding the use and handling of fertilizing materials.

FREP has developed two project options for board recommendation that are to be reviewed by the Technical Advisory Subcommittee (TASC):

- 1) Have three University of California Cooperative Extension (UCCE) County Level Community Educators in the field work with growers on water quality compliance issues, determining weak links and addressing knowledge gaps. Irrigation efficiency is key to nutrient management. In addition, FREP proposes a Mobile Irrigation Lab project, structured as a grant program, to conduct efficiency evaluations on irrigation systems. This option would be a \$1 million approach with a funding source from FREP.
- 2) Have five UCCE County Level Community Educators, a Mobile Irrigation Lab grant, and a Program Evaluator. The second option would be a \$1.5 million approach with a three-year funding source from FREP and FMIP.

Chair McQueen asked about being able to obtain a funding source from FMIP in option two. Dr. Ba stated FREP has authority for the \$1 million funding source due to the FAC mandate, but at this time the ask is whether the board sees merit for FREP to be engaged in the process of regulatory issues impacting agriculture.

Cady stated FREP's research priorities are addressed during the TASC review of concept proposals, giving an overview of the grant process timeline of concept and full proposals due dates, when applicants are notified by letter and projects begin.

Dr. Duarte suggested FREP get fertilizer manufacturers involved because fertilizer products can have a varying salt index and focus on manufacturers that produce fertilizers with low salt index. Dr. Duarte advised having a good map of soils, because soil type rotations differ on nitrate and the retention of nitrates will differ on salts. Dr. Duarte stated that controlling the allocation of irrigation per crop will prevent the leaching of salts and nitrates as in many cases of overirrigating. Dr. Duarte further recommended that the CCA training include education on soil microbiology, highlighting the importance of soil health, the organic matter in soil and the activity of the microorganisms in soil. Dr. Duarte stated most county ag commissioners have a map of soils that would help determine thresholds for nitrate and salts imported in the county and type of soil area as it varies from coast to coast. Dr. Duarte expressed that the focus be towards improving where funds are allocated.

Cady stated FREP has a non-regulatory role whose goal is to support growers in the field who are using the products.

Young provided clarification stating as a regulatory agency, the FMIP field staff is responsible for regulating fertilizer manufacturers, whereas FREP is solely focused on research-based and nonenforcement activities.

Discussion ensued regarding FREP's project proposals.

Renee Pinel, Chief Executive Officer of Western Plant Health Association, expressed concern about FREP's level of engagement to solicit grant requests and recommended that FREP engage in more direct discussion with coalitions to ensure their growers are engaged in this process in order to determine a need.

Cady stated FREP can explore that route. Cady stated FREP has been talking with UCCE in earlier iterations of the proposals due to its well known structure and statewide operating procedure.

Pinel advised FREP to provide coalitions the tools to solicit cooperative extension in order to get a focus on the specific needs of growers within a coalition as opposed to having one or two UCCE specialists attempting to make the assessment for a regionwide area.

Chair McQueen asked the board for a recommendation to address FREP's proposals as presented or present the next steps going forward.

Chris Gallo advised FREP look at alternatives before moving forward with a proposal to ensure that full engagement with coalitions are made and determine industry's involvement and support.

Vice Chair Gary Silveria advised FREP to seek alternative funding sources and not use \$0.5 million from FMIP as a funding source.

Greg Cunningham asked FREP to provide more detail at the next FIAB meeting. Cady stated FREP can create a more detailed proposal for a more holistic view of the program.

Chair McQueen stated there might be another option aside from the options presented by FREP and advised the program to work with coalitions and more external resources available.

Chair McQueen asked for a board motion along with a proposal on how to move forward at the next FIAB meeting on whether to proceed with either project proposal, recommend a supporting alternative for proposal one, or advise FREP to provide an alternative at the next FIAB meeting.

Howard expressed concern about the program's reserve, advising the board and program to be diligent on where funds are allocated in the future.

MOTION: Miguel Duarte moved to request that FREP provide more information on coalitions and a revised proposal to present at the next FIAB meeting to obtain solid information prior to a board recommendation; Chris Gallo seconded. The motion passed unanimously by all board members present with a vote of 8 to 0.

Dr. Martin Burger reported on the total registrations as of December 31, 2020, for conventional fertilizer and OIM that were approved (2,624 OIM; 9,577 fertilizer), provisional (21 OIM; 10 fertilizer), pending review (67 OIM; 176 fertilizer), resubmitted (135 OIM; 154 fertilizer), or in data/revisions required (16 OIM; 575 fertilizer) status. Dr. Burger also reported on the total number of approved labels by product category for conventional fertilizer and OIM that have were completed in 2019 compared to 2020. Dr. Burger presented new applications and renewals for conventional fertilizer and OIM that were completed during the start of telework (March – December 2020) compared to approvals completed in the same period last year.

At the last FIAB meeting, there was uncertainty about appointing a family member to the board. Dr. Burger reported that the Department's Legal Office determination was that there was no specific prohibition of two spouses serving on the same board. The Department's nepotism policy only pertains to the Department's employment benefits. There is also no specific prohibition in the conflict of interest code; however, there could be an issue for the board if recusal of one spouse is required due to a financial interest issue, both partners must recuse themselves. Dr. Burger reported that the Bagley Keene Open Meeting Act does not address the issue of having two spouses on the same board, but it states that agenda items cannot be discussed by board members outside of a public meeting. Two family members serving on the same board may give

the wrong public perception considering the principles of transparency in government, public trust, and unbiased government decision-making process. Further, in this instance, there were 11 candidates to fill four vacancies.

Young gave a report on the 2020 sampling summary, stating the program received 836 total samples. Field staff obtained a good segment of samples considering the pandemic in place. Young stated the violation rate of 12 percent calculated manually, is not complete. Violation rates are commonly 20 percent due to product labeling issues leading to analytical violations. Young reported a number of 433 conventional samples and 403 OIM samples; 20 samples for one product is currently under investigation.

The FMIP received 145 formal complaints which is double any prior year; over 80 percent were label or website claim related; 117 are resolved, and 28 have ongoing investigations. The total of administrative penalties for the 2020 notices of proposed actions was \$492,338, predominantly due to one case. Two additional cases are currently filed for this year. A press release was published to industry regarding the stop use notice for the State Organic Program and a statewide quarantine; that case is still ongoing.

Young provided a lime labeling working group update as requested at the last FIAB meeting. The workgroup's goal was to provide growers with a better metric for determining the quality of a bulk liming material by potentially creating a label regulation for "Lime Score" or "Efficiency Rating" or "Effective Neutralizing Value"; or not create a label regulation, but continue to permit firms to include the Oregon Lime Score on labels.

Young reported the current label requirements include Calcium Carbonate Equivalent (CCE), nutrient guarantees, sieve analysis (bulk), and maximum moisture (bulk). There is no industry standard for general liming quality. The Association of American Plant Food Control Officials (AAPFCO) does not have a uniform bill or guidelines. Particle size is a major factor of quality (along with CCE). Oregon requires an "Oregon Lime Score" ($CCE \times \text{Fineness Factor} \times \text{Moisture Factor}$). Missouri requires an "Effective Neutralizing Material (ENM)" calculation ($CCE \times \text{Fineness Factor} \times 800$). Other states utilize "Effective Neutralizing Value (ENV)", "Relative Neutralizing Value (RNV)", "Effective Neutralizing Power (ENP)", or "Effective CCE", but values vary from state to state due to different equations.

Young reported that the the workgroup looked at six examples; only two examples were presented to the board. The first example was 105.6 percent CCE with the percentage amount of a 20-60-mesh sieve based on a fineness factor to calculate the effectiveness of the liming material to get the ENV. The second example was similar to the first, however, it has the value of fine material and multipliers; it was 90 percent CCE and the effective rating multiplied by 100-mesh to get the effective CCE. The takeaways from the workgroup is that there is interest in California adopting a lime quality standard. "Lime Score" appears to be a preferred name for lime quality. There was a consideration of moisture for California's Lime Score; however, bulk labels already require "Moisture

(Max)" guarantee. Moisture would be incorporated if California adopts Oregon's Lime Score.

Young stated that the FMIP's registration staff will research data to evaluate the difference in reaction periods for different lime mesh sizes (10, 20, 40, 60, 100) which will be critical to establish a scientific merit for liming quality. More updates will be provided at the next FIAB meeting.

The AAPFCO winter annual virtual conference will be February 15 – 17, 2021.

Gallo and David McEuen signed off at 12:00 p.m.

ELECTION OF CHAIRPERSON OF THE FIAB

Vice Chair Silveria asked to table the election of the chairperson for the next FIAB meeting. Dr. Ba agreed stating the discussion be tabled for the next meeting.

MOTION: Greg Cunningham moved to approve discussing the election of chairperson at the next meeting; Timothy Howard seconded. The motion passed unanimously by all board members present with a 6 to 0 vote.

CENTER FOR ANALYTICAL CHEMISTRY (CAC) LAB UPDATE

Maryam Khosravifard presented the lab update on assays completed for samples received from January 1 to December 31, 2020, with a breakdown percentage of assays completed between 10, 15, and 21 days. Khosravifard reported that CAC encountered multiple challenges during the pandemic, including the maintenance of the sulfur analyzer and matrices and modification of methods for instrumentation. Overall, most samples were analyzed in 10 days and all were completed within 21 days. Khosravifard reported a total of 3,512 assays with an average 8-day turnaround time. CAC received a total of 822 samples through the 2020 calendar year; 11 percent of rush samples were completed in five days with an average assay of 4.5 per sample.

Khosravifard reported that after the Feed program departure from the CAC, staffing for CAC consists of one full-time Senior Environmental Scientist (SES) (Supervisor), SES (Specialist), two Environmental Scientists, one Senior Lab Assistant, two Lab Technicians, one Agricultural Biotechnician, and one seasonal Scientific Aid.

At the last FIAB meeting, there was a request from the board about distinguishing gypsum and gypsum equivalent products. Khosravifard stated that CAC's method does not distinguish between the two components. CAC tests for calcium and sulfur and gypsum equivalent is reported based on those percentages, which does not create an accurate percentage on the label. CAC started a study with Mettler-Toledo to evaluate application of Thermogravimetric method used in the analysis of cement. Samples were sent to measure water of hydration for gypsum (calcium sulfate dihydrate) and calcium sulfate anhydrite. When directed by FMIP, the CAC will work with the vendor in utilizing this alternative method for gypsum analysis.

PUBLIC COMMENT

No public comments were made.

AGENDA ITEMS FOR NEXT MEETING

Vice Chair Silveria asked for agenda items for the next FIAB meeting.

Vice Chair Silveria requested that a gypsum analysis update from CAC, a lime score labeling working group update, and FREP's revised project proposal be agenda items.

NEXT MEETING

The next FIAB meeting will be on June 10, 2021 at 9:00 a.m.

MOTION: Timothy Howard moved to adjourn the meeting; Greg Cunningham seconded. The motion passed unanimously by all board members present with a 6 to 0 vote.

Vice Chair Silveria adjourned the meeting at 12:06 p.m.

Respectfully submitted by:

ORIGINAL SIGNED BY

Nick Young
Environmental Program Manager I
Fertilizing Materials Inspection Program

02/11/2021

Date