



COMMERCIAL FEED
REGULATORY PROGRAM

QUARTERLY FEED UPDATE

Issue 14 | Spring 2023

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Calendar

- April 30, 2023
2023 Quarter 1
Tonnage Tax Due
- May 29, 2023
Memorial Day

2022 Sampling Summary

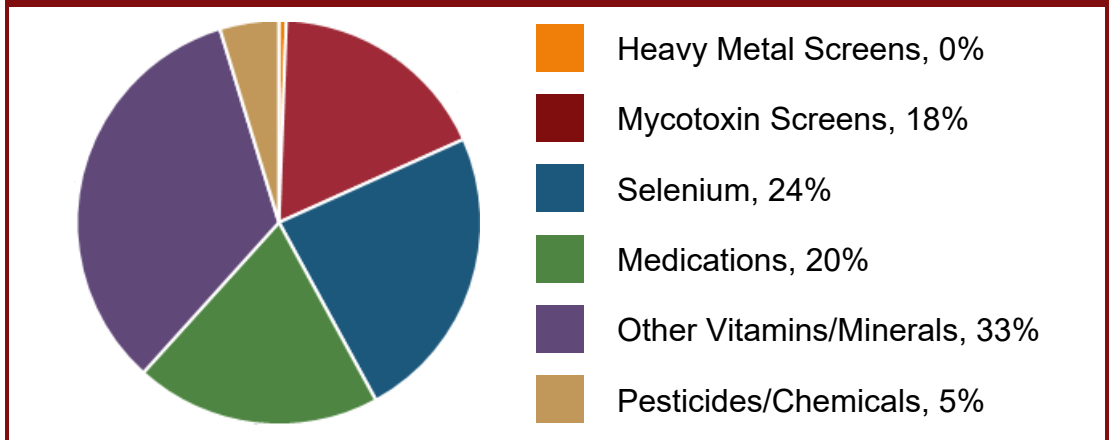
The Commercial Feed Regulatory Program (CFRP) has finalized its 2022 sampling data. CFRP inspectors collected a total of 839 commercial feed samples in 2022 (Table 1). Of the 839 total samples, 794 were obtained as part of CFRP’s routine sampling plan. The remaining 45 samples were obtained for investigative purposes, including mixer studies, flush verifications, Safe Animal Feed Education (SAFE) Program research, complaints, etc.

CFRP obtained 60% of samples for food safety reasons and 40% for label compliance (Table 1). Food safety analyses performed include selenium concentration, mycotoxin screens, heavy metal screens, medicated feed, vitamin/mineral nutrient concentration, and pesticide screens (Figure 1). Of the 360 samples of single ingredients taken, 129 were almond hulls, 88 were corn,

Table 1. 2022 Sample Types	Number	Percentage
Food Safety	509	60%
Label Compliance	330	40%
Total	839	100%
Violative Samples	203	24%*

**of official samples only*

Figure 1. 2022 Food Safety Analyses



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Sampling Summary, from page 1

and 24 were cottonseed (Figure 2). There were 203 samples with one or more associated violations (24% of official samples obtained), with crude protein, label violations, and crude fiber (almond hulls only) being the most prevalent issues (Figure 3). There were 239 individual violations issued, with some samples receiving multiple violations. Common label violations included California Code of Regulations Title 3, Sections 2694, 2701, and 2697 and Food and Agricultural Code Sections 14991 and 14992. Sample origins are shown in Figure 4 on page 3.

Figure 2. 2022 Feed Products Sampled

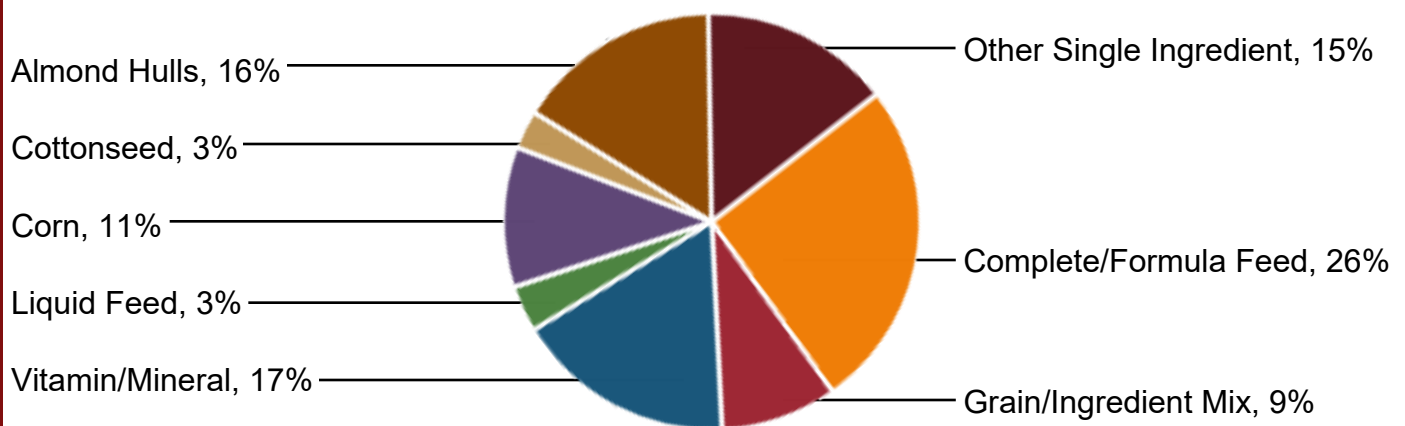
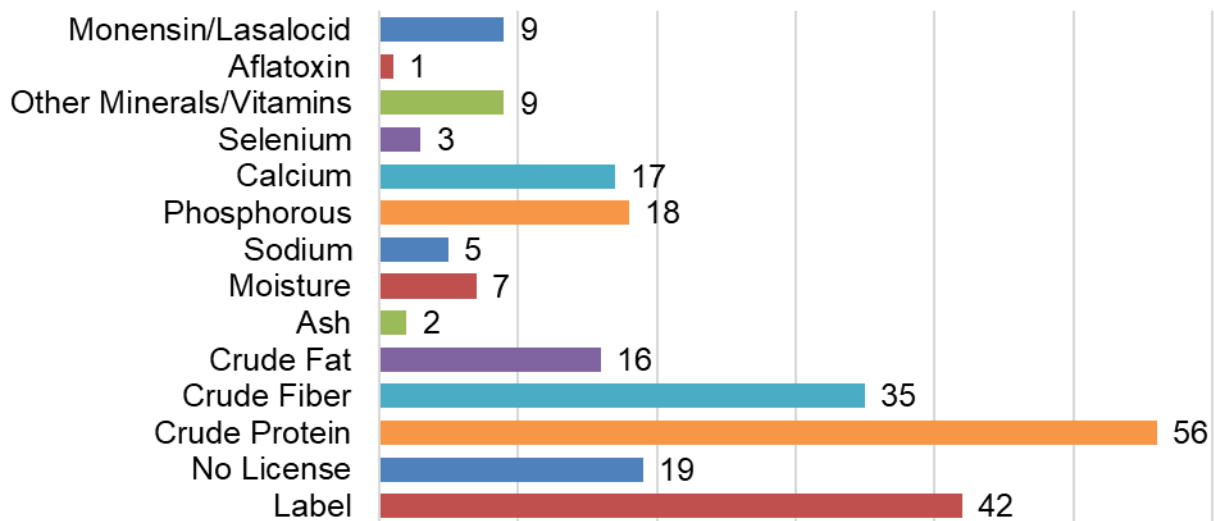


Figure 3. 2022 Violation Types



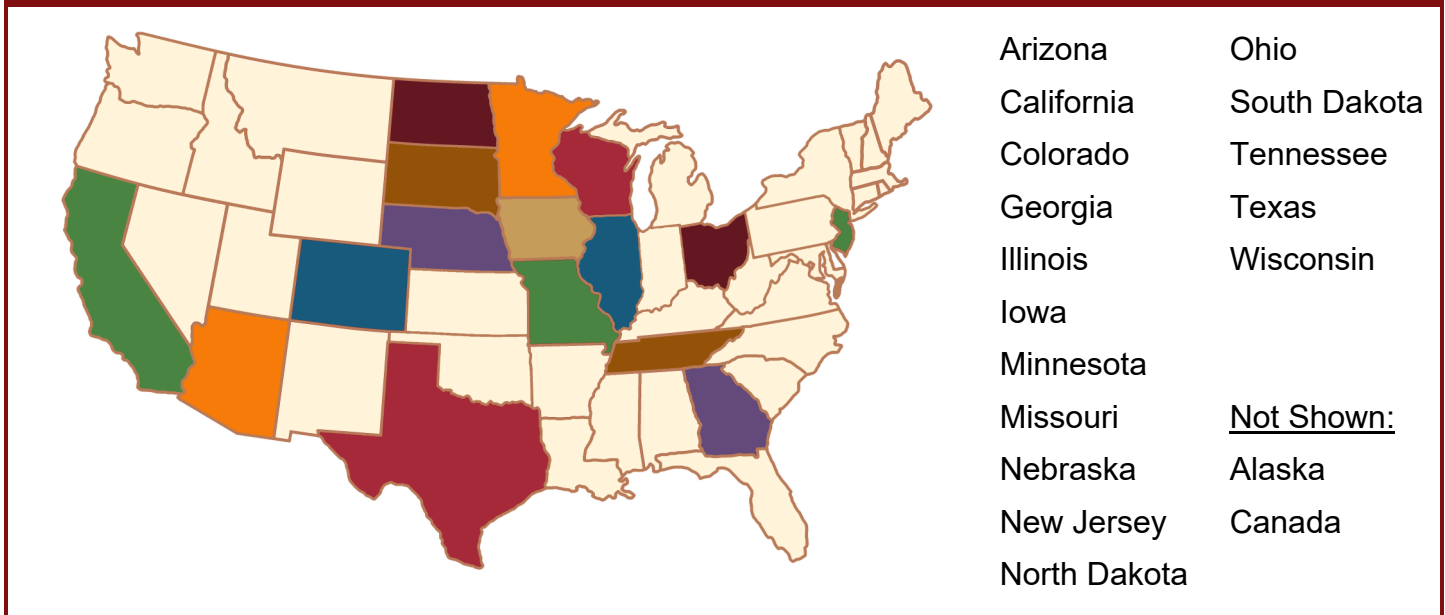
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Figure 4. 2022 Sample Origins



State of the Science Summit: Feed Strategies to Reduce Enteric Emissions

The California Department of Food and Agriculture and the University of California (UC), Davis College of Agricultural and Environmental Sciences hosted a two-day conference: [State of the Science Summit: Feed Strategies to Reduce Enteric Emissions](#). The Summit was held May 2-3, 2023, at [UC Davis](#).

The Summit included informational presentations and panel discussions with leading experts in methane mitigation and animal science, connecting the dots between the scientific and regulatory aspects of feed strategies to reduce enteric emissions. The goal was to identify opportunities for collaboration and research that can help the dairy and beef industries meet climate goals.

The event featured California Department of Food and Agriculture Secretary Karen Ross

and UC Davis College of Agricultural and Environmental Sciences Dean Helene Dillard, as well as other leading academic researchers, CDFA staff, and cattle producers and industry representatives.

Panels discussed:

- The state of current research around enteric methane reductions via feed strategies
- Methods and protocols for evaluating methane reduction
- Opportunities for research
- Supply chain drivers influencing the adoption of feed additives
- Outlook and industry guidance when evaluating product safety and claims
- Producer adoption of feed additives

Additional information will be featured in next quarter's newsletter.

2022 Crop Year Mycotoxin Report

The California Department of Food and Agriculture (CDFA) Commercial Feed Regulatory Program (CFRP) surveys each year's corn crop received at feed mills in California for the presence of mycotoxins. This year, 50 samples were obtained between late October 2022 and early March 2023 to provide this preliminary mycotoxin survey of the 2022 corn crop year. Whole corn samples originated from Iowa, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

The U.S. Food and Drug Administration (FDA) has established tolerance levels for aflatoxin, fumonisin and vomitoxin by species and class of livestock¹. The tolerance level for aflatoxins varies by species from 300 parts per billion (ppb) for finishing beef cattle to 20 ppb in dairy cattle. Due to California's prominent dairy industry, CFRP requires that all commercial feed in California not exceed 20 ppb total aflatoxin, since it can be transferred into milk and poses a human health concern. Tolerance levels for fumonisins range from 5 parts per million (ppm) for equids and rabbits to 100

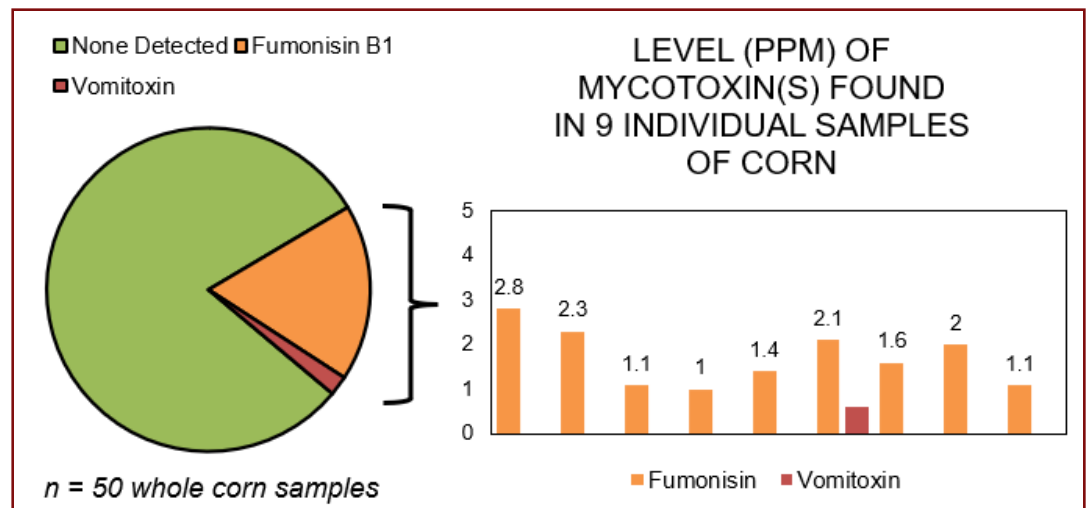
ppm for poultry raised for slaughter. Vomitoxin tolerance levels in feed ingredients range from 5 ppm for swine to 30 ppm for beef cattle. FDA has not established guidance for the other mycotoxins tested.

The University of California, Davis, California Animal Health and Food Safety Laboratory conducted 10 mycotoxin analyses on each of the 50 samples, for a total of 500 analyses. Of the 50 samples analyzed, 41 (82%) resulted in no detectable levels of mycotoxins (Figure 1). There were nine samples of corn with detectable levels of fumonisin B1 and/or deoxynivalenol (vomitoxin), which were all under 3 ppm. No samples contained any detectable levels of aflatoxin (B1, B2, G1, G2), Zearalenone (F-2 toxin), T-2 toxin, H-T2, or ochratoxin. None of the samples contained levels of a mycotoxin considered to be a safety concern.

1: FDA Center for Veterinary Medicine (2016). *CVM Annual Report on Mycotoxins in Animal Food Report for Fiscal Year 2016*.

<https://www.fda.gov/media/130526/download>

Figure 1.
Mycotoxins detected in 9 of 50 samples of whole corn from the 2022 crop year and level detected, reported in PPM.



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2022 Tonnage Report

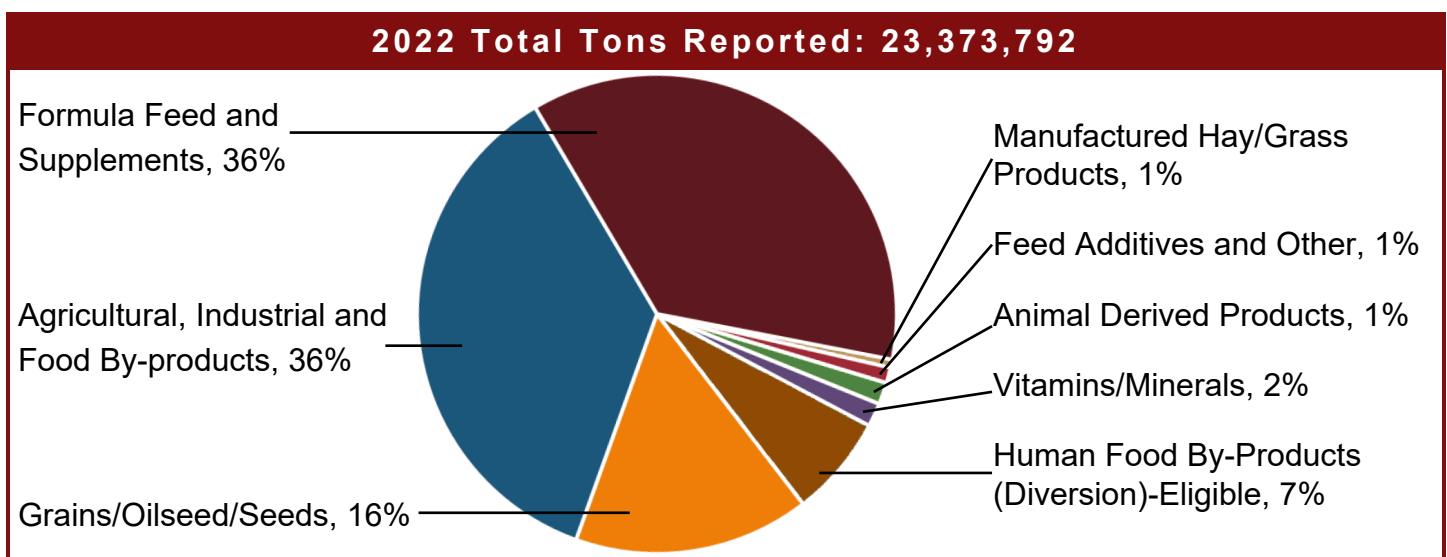
The California Department of Food and Agriculture (CDFA) Commercial Feed Regulatory Program (CFRP) is funded by the feed industry with an annual license fee and tonnage tax. The 2022 tax rate was ten cents (\$0.10) per ton of feed distributed to the end-user in the State. Certain human food by-products were eligible for a lower tax of five cents (\$0.05) per ton to incentivize diversion of by-products to commercial feed.

Changes have been made to the tonnage reporting section in the ExtraView database to allow the licensee to provide the type of feed and intended species. This information is increasingly valuable to the CFRP, researchers, and other stakeholders to understand the California feed industry in a changing market. CDFA Safe Animal Feed Education (SAFE) Program has evaluated

2022 tonnage data to provide the first annual Commercial Feed Tonnage Report. Categorization of feed type in this report is an estimation rather than exactly as provided by the licensee. Evaluation of the data revealed there has been inaccurate use of the feed categories, and some tonnage was re-categorized based on the written descriptions of the product/commodity. Clarifications will be made to the tonnage reporting section in the ExtraView database and guidance documents will be provided to help work towards a reporting system that is categorized appropriately by the licensee at the time of reporting.

Over 23 million tons were reported to the CFRP in 2022, with over one-third as formula feeds and supplements (Figure 1, Table 1). “Formula feed” is defined as any

Figure 1. Percentage of total 2022 tonnage in each feed type.



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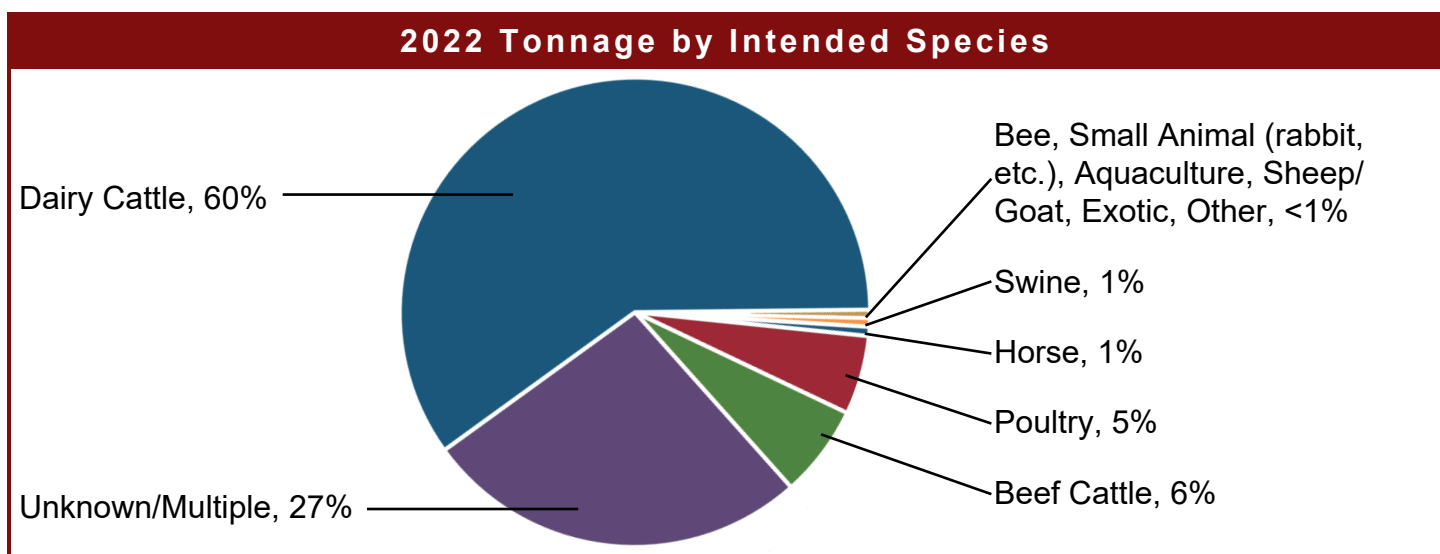
two or more feed ingredients, proportioned, mixed, and processed according to specifications. About 43% of the tonnage reported was categorized as an agricultural, industrial, or human food by-product. About 16% of tonnage was categorized as grains and seeds, and all other feed types made up 2% or less of the total tonnage. (Figure 1, Table 1). The majority (60%) of tonnage reported was identified as intended for dairy cattle (Figure 2).

Visit CFRP's website to read the complete 2022 [Tonnage Report](#).

Table 1. Total tonnage in each feed type in 2022.

Feed Type	Tons
Formula Feed	8,400,921
Agricultural By-products	7,134,780
Grains/Oilseed/Seeds	3,721,840
Human Food By-Products (Diversion)-Eligible	1,598,945
Industrial By-products	948,615
Vitamins/Minerals	371,257
Animal Derived Products	345,856
Other Human Food By-products	338,870
Other (Specify)	196,760
Supplement/Concentrate	139,621
Manufactured Hay/Grass Products	128,389
Feed Additives	47,939
Grand Total	23,373,792

Figure 2. Total tonnage reported in 2022 by intended species of animal.



STAFF SPOTLIGHT: Amber Hayter

What is your name?

My name is Amber Hayter.

How long have you worked for CDFA?

About a year and a half.

What is your job title and what do you do?

I am an Environmental Scientist for the Feed and Livestock Drugs Inspection Program. Most of my time is spent in the field conducting routine sampling and inspections at feed manufacturing facilities on behalf of the Commercial Feed Regulatory Program. There are state laws and regulations that the feed manufacturing industry must comply with, and my duty is to ensure these laws and regulations are being followed. I also visit retailers and distributors of livestock drugs to verify compliance with our Livestock Drug Program.



Staff Spotlight is a new recurring feature to help industry get to know our team.

How do you work for the California food supply? I work for the California food supply by inspecting and regulating the feed that is manufactured and processed for livestock. Our program ensures that the feed manufacturing industry in California is supplying safe feed for animals which, in turn, supplies safe meat, milk, and eggs for human consumption.

What do you enjoy most about your job?

There are many things I enjoy about this job, but most of all I love being out in the field. Almost every day is different. Being in the field allows me to see all aspects of the manufacturing process, from start to finish. My favorite days are spent sampling feed at dairies because I get to drive around all the country backroads, hopping from one dairy to the next.

What are you most proud of?

One thing I am most proud of is my job. I am very happy that I decided to step outside of my comfort zone and pursue a career in agriculture. I do not have an agricultural background, so this has all been very new to me. I have learned so much and my supervisors are always telling me to keep up the great work, which must mean I'm doing something right!

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NOTICE TO INDUSTRY: Tonnage Auditing ([released March 3, 2023](#))

The Commercial Feed Regulatory Program (CFRP) periodically conducts audits of licensed firms and individuals to ensure that all licensees are accurately paying their quarterly Feed Inspection Tonnage Tax. The CFRP will be performing detailed audits of quarterly tonnage reported to CFRP by licensees during the last three years. Selections for auditing will be random, and no licensees will be exempt from an audit regardless of the number of tons reported. Audits will be inclusive of manufacturers, brokers, and distributors of all tonnage types.

Anyone who sells, distributes, or manufactures commercial feed must obtain a California Commercial Feed License at all locations. They may also be subject to an audit of the reportable feed tonnage at that location.

Tonnage reporting is required by any licensee that is the last person in a sale of commercial feed to a consumer-buyer, or if purchased to be fed to his or her own animals. Since retail stores are exempt from licensing, the inspection tonnage tax for packaged feeds sold in retail stores is paid by the licensee named on the commercial feed label.

All Human food by-products firms are exempt from paying the first one thousand (1000) tons of human food by-products diverted to animal feed per Title 3 of the California Code of Regulations (CCR), Section 2750(e). Firms reporting this tonnage exemption should be reporting from each licensed location from where the diversion occurs.

Licensees must be prepared to provide up to three years of prior tonnage reporting for review by CFRP ([Title 3 of the CCR, Section 2750](#)).

For more information regarding tonnage tax reporting, and/or to determine if you should be reporting tonnage tax, please see the Feed Facts FAQ on the CFRP website, located here: <https://www.cdfa.ca.gov/is/docs/FFLDRSFeedFacts.pdf>. For additional information or questions please contact CFRP at (916) 900-5022 or email at feed_lvstk@cdfa.ca.gov.

3 CCR § 2750. Tax Payment.

(a) Each commercial feed licensee whose name appears on a commercial feed label shall pay the inspection tonnage tax as required in section 15062 of the Food and Agricultural Code.

(b) Reports of taxable sales shall be made quarterly to the director not later than one calendar month after March 31, June 30, September 30, and December 31 on a form furnished by the director. Quarterly reports and payments become delinquent on May 1, August 1, November 1, and February 1, for the respective preceding quarter.

(c) A completed tax report must be filed for each quarter whether or not taxable sales have been made in that period.

(d) Each licensee shall keep accurate records of sales of commercial feed which shall be available for examination by the director and shall include the date of sale, to whom sold, the name and net weight of the product sold. The records shall be maintained to support the reports for the previous three (3) years.

(e) Human food by-products as defined under Section 2804 that are diverted to animal feed without further manufacturing/processing beyond what is stated in the ingredient definition are subject to reduced inspection tonnage tax set by the Secretary. Firms shall be exempt from paying inspection tonnage tax on the first one thousand (1,000) tons of human food by-products diverted to animal feed during the license period as defined in Section 15054 of the Food and Agricultural Code.



SAFE Updates

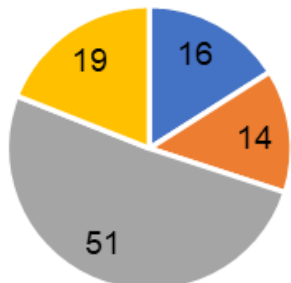
SAFE Survey for Feed Industry

The Safe Animal Feed Education (SAFE) Program conducted a survey through SAFE and FEED listserv subscribers, as well as all licensees via the ExtraView Database listserv to assist the program with identifying areas to focus its outreach and educational resources in 2023.

This survey was successful in reaching various sectors of the feed industry. Out of 100 responses, the majority (51%) of participants identified themselves as a livestock feed manufacturer in California, 16% were brokers/re-sellers, 14% were human food processing facilities selling by-products to animal feed, and the rest included out-of-state manufacturers, ingredient manufacturers, retailers, and nutritionists (Figure 1).

Figure 1. Types of Participants

- Broker/Reseller
- Human Food/By-Products Processor
- Livestock Feed Manufacturer in CA
- Other



The primary question of the survey was:

“I and/or employees at my company would benefit from education in which of the following areas?” Select all that apply.

At least 30% of participants selected the seven topics shown in Figure 2.

Participants were also asked to choose the value of education in the areas selected. The responses demonstrate SAFE plays an important role in helping industry voluntarily gain compliance with regulations and improve operations and processes to ensure the safe manufacture of commercial feed (Figure 3).

Responses indicate the preferred method of resources is a virtual format (Figure 4). However, options for in-person workshops and visits were still selected at 14-25%, showing value in these formats. SAFE supports online/virtual delivery of materials as much as possible; however certain educational activities and topics may be more effective in person.

The final survey question asked participants to select yes or no to this statement:

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“In addition to outreach and education for the feed industry, I think SAFE resources would be well used in developing educational materials designed to educate the general public and/or other agencies on current issues regarding livestock feed and by-products.”

The responses were split 50/50. Since SAFE is industry funded, resources have always been focused on the licensed commercial feed industry. The program recognizes gaps in knowledge and available educational materials regarding the role of the feed and animal agriculture industries in meeting environmental and sustainability goals. This survey showed half of participants feel some

resources could be devoted to this area.

On Track with 2023 Survey

The program has recently completed new resources for commercial feed label requirements. On the [SAFE webpage](#) there is a new section for resources on commercial feed label requirements. This includes the [California Commercial Feed Labeling Guide](#), **NEW** [Label Review Checklist](#), and the [Medicated Feed Label Guide](#).

While there are currently resources regarding feed safety hazards available on the [SAFE Food Safety Modernization Act webpage](#), the program looks forward to developing more resources and outreach in this area.

Figure 2. Participant Responses

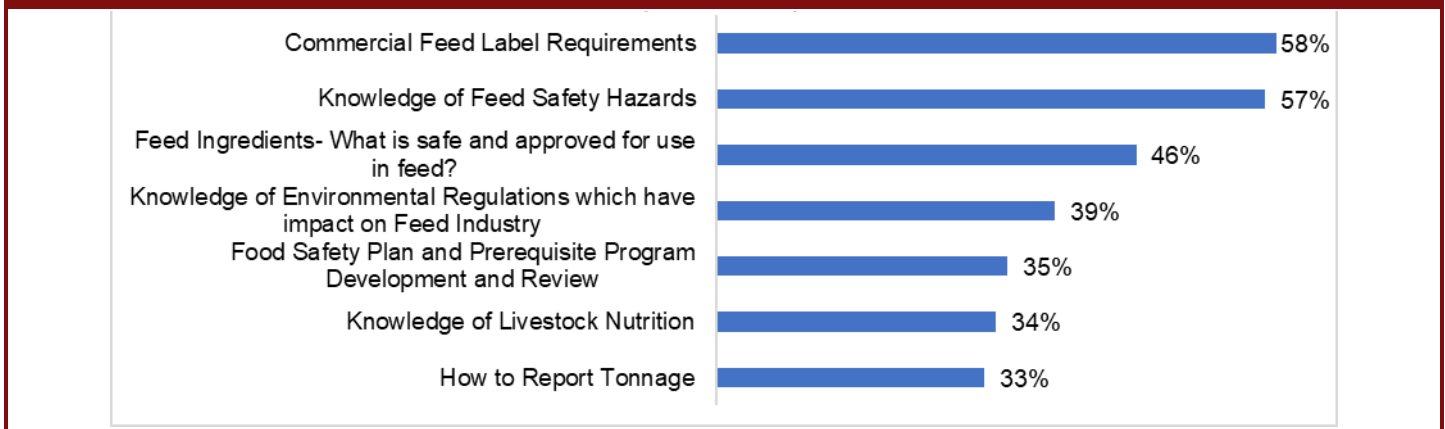


Figure 3. Value Associated with Education

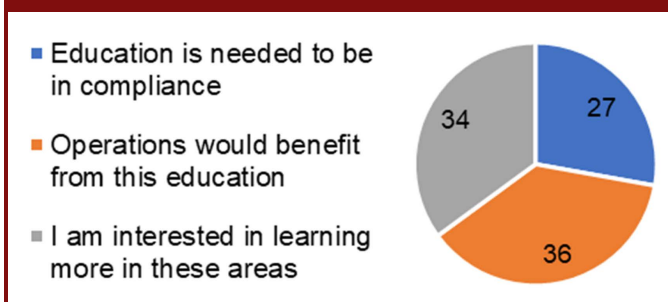
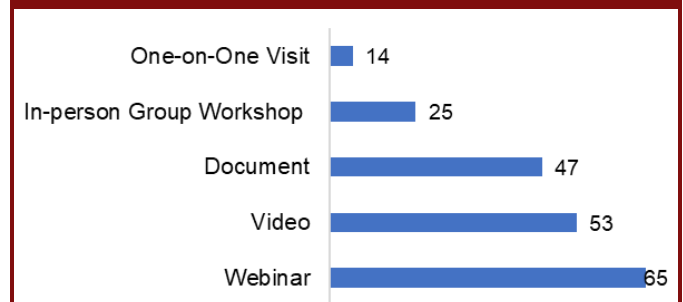


Figure 4. Preferred Format of Education



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Additionally, 35 participants of the SAFE Survey selected *Food Safety Plan (FSP) and Prerequisite Program Development and Review*. This demonstrates that it is important for SAFE to continue providing voluntary educational FSP reviews to industry in 2023. If you are interested in help with your food safety plan, email the SAFE program at safe@cdfa.ca.gov.

A new link has been added to the SAFE webpage for the U.S. Food and Drug Administration's (FDA) new webpage: [How do I Start an Animal Food Business?](#)

Resources regarding human food diversion to animal feed are provided on the [SAFE Human Food Waste Diversion Webpage](#), including the **NEW** [How to Report Tonnage of By-Products Diverted to Animal Feed](#). In light of the 2022 Tonnage Report data, SAFE and the Commercial Feed Regulatory Program are also working to provide further clarity and guidance for tonnage reporting.

The program is also beginning projects for outreach and education regarding livestock nutrition/feed safety, the feed ingredient/ drug approval process, and environmental regulations.

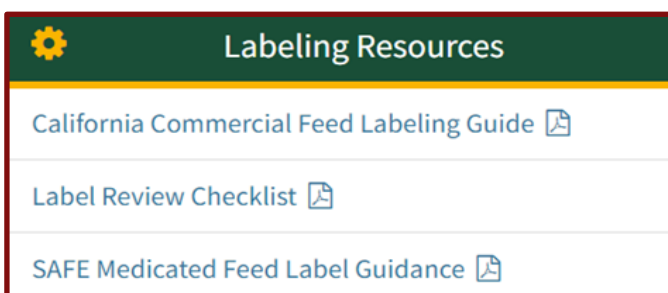


AAFCO Midyear Meeting

CFRP and SAFE attended the Association of American Feed Control Officials (AAFCO) Midyear meeting held in San Antonio, Texas January 17-19, 2023. The meeting was attended by over 450 people from 45 states, of which about 50 attended virtually.

CDFA staff sit on the following committees: Mike Davidson (Inspection and Sampling, Model Bill and Regulations), KC Gutenberger (Ingredient Definitions, Feed and Feed Ingredient Manufacturing), Samantha Moran-Defty (Education and Training, Inspection and Sampling). Additionally, Mike Davidson is the Citrus Products Investigator and KC Gutenberger is training to be the Miscellaneous Products Investigator.

Prior to the Midyear meeting, Mike Davidson and KC Gutenberger also attended an in-person Ingredient Submission Training Course hosted by AAFCO on Monday, January 16, 2023. The training was attended by 130 individuals from the feed industry and state and federal regulators and consisted of presentations from FDA, an industry panel, an FDA panel and four rounds of "speed-dating" with experts from industry and FDA on various topics.



Labeling resources on the SAFE webpage.

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CGFA Grain and Feed Industry Conference

CFRP and SAFE participated on a panel presentation at the annual California Grain and Feed Association (CGFA) Grain and Feed Industry



Conference. Jenna Leal, KC Gutenberger, and Cathryn McCandless presented data from the 2022 Commercial Feed Tonnage Report to answer the question “Who We Feed and the Commodities and By-products We Use in California”, and answered questions.

AFRPS Face-to-Face Meeting

Rachelle Kennedy, Senior Environmental Scientist Supervisor; Samantha Moran-Defty, Senior Environmental Scientist Specialist; and Erika Lewis-Ortega, Research Data Specialist II attended the annual Animal Feed Regulatory Program Standards (AFRPS) Face-to-Face meeting in Mobile, Alabama on March 21-23, 2023. Attendance at this meeting is required per the terms of the Commercial Feed Regulatory Program’s (CFRP’s) AFRPS cooperative agreement with the U.S. Food and Drug Administration.

Erika and Samantha participated in two panel presentations and discussed the various ways CFRP has utilized Excel to enhance program operations and work planning. CFRP thanks FDA for the opportunity to attend this meeting and collaborate with other AFRPS states.



AFRPS
Animal Feed Regulatory Program Standards



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Join the Commercial Feed Regulatory Program and Safe Animal Feed Education Program email lists to receive the Quarterly Feed Update and other industry updates delivered to your inbox. Sign up at cdfa.ca.gov/subscriptions/ or email feed_lvstk@cdfa.ca.gov or safe@cdfa.ca.gov



Samantha Moran-Defty and Erika Lewis-Ortega present at the AFRPS Face-to-Face Meeting in Mobile, AL.

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