



Human Food By-products Diverted to Animal Feed

Human food by-product diversion is the process of taking food that is no longer suitable for human consumption and redirecting it to be used in manufacturing feed for livestock. This diversion of food by-products into animal feed ensures that this consumable material does not go to waste and additionally, is used to fortify feed necessary to provide a healthy and nutritious diet to California livestock.

These products can include cull fruits and vegetables (Figure 1, for example), fruit and vegetable pomace, bakery products (Figure 2, for example), products that are at the end of their shelf life, and more. By-products are eligible to be diverted to animal feed if they have been properly stored, handled, and/or have remaining nutritional value for livestock. Streams of by-product diversion can include food from human food manufacturing facilities, human food distribution facilities, restaurants, retail establishments, and institutions that serve food such as hotels or cafeterias.

Below is an outline of the California and Federal Feed Laws and Regulations relating to Human Food By-products diverted to Livestock Feed. Links to more information are incorporated into each title or section.

1. By-product definition

- a. "By-product" means a product produced in addition to the principal product, may be produced during processing, rejected as inferior during the process of grading or separating, or is produced via an industrial or biological process.
- b. A by-product may not contain any substance that would render it injurious to health.
- c. Human Foods Exclusively Diverted to Animal Feed have their own feed ingredient definitions. These definitions can include: Wet Food Processing Waste, Restaurant Food Waste, Recovered Retail Food, Cull Fruit or Vegetables and other by-product ingredients such as wet brewer's grain and liquid whey. These feed ingredient definitions can be found on the California Department of Food and Agriculture's (CDFA) website at: https://www.cdfa.ca.gov/is/ffldrs/pdfs/Human_Food_Waste_Byproducts_Definitions.pdf.
- d. Use of the following ingredients, from mammalian origins, is restricted to non-ruminant feeds unless specifically exempted by 21 Code of Federal Regulations (CFR) 589.2000; additional information can be found on the U.S. Food and Drug Administration's (FDA) website at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=589>.
- e. Feeds containing prohibited material must bear the following label statement: **"DO NOT FEED TO CATTLE OR OTHER RUMINANTS."**



Figure 1: Oranges as Cull Fruit for Feed.



2. Quarterly Reporting and Tax, CDFA website at:

https://www.cdfa.ca.gov/is/ffldrs/Feed_LawsRegsFees.html.

- a. If the firm name appears on the feed label, a quarterly tonnage report must be submitted to CDFA and taxes must be paid on tonnage.
- b. Quarterly reports are due **NO LATER THAN** May 1, August 1, November 1, and February 1 for the preceding quarter. They will be considered delinquent after the above dates.
- c. A tax report must be completed regardless of taxable sales made in the previous quarter.

3. Tax Record

- a. Records of sales of commercial feed, including date of sale, to whom sold, and the name and net weight of the product sold must be kept.
- b. Sales records should be maintained for three years.

4. Licensing, on the CDFA website at:

https://www.cdfa.ca.gov/is/ffldrs/Feed_LawsRegsFees.html.

- a. The annual commercial feed license fee is \$500 for each location which manufactures livestock feed.

5. Proper Handling, Labeling, and Shipping of Human Food By-products

- a. Human food by-products held for distribution as animal food must be held under conditions that will protect against contamination, including:
 - i. Containers and equipment used to convey or hold human food by-products for use as animal food before distribution must be designed, constructed of appropriate material, cleaned as necessary, and maintained to protect against the contamination of human food by-products for use as animal food.
 - ii. Human food by-products for use as an animal food held for distribution must be held in a way to protect against contamination from sources such as trash.
 - iii. During holding, human food by-products for use as animal food must be accurately identified.
- b. Labeling that identifies the product by the common or usual name must be affixed to or accompany the human food by-products for use as animal food when distributed.
- c. Shipping containers (e.g. totes, drums, and tubs) and bulk vehicles used to distribute human food by-products for use as animal food must be examined prior to use to protect against the contamination of animal food from the container or vehicle when the facility is responsible for transporting the human food by-products for use as animal food itself or arranges with a third party to transport the human food by-products for use as animal food.



Figure 2: Dried Bakery Product.

For more information about Human Food Diverted to Livestock Feed, please contact the Safe Animal Food Education Program at safe@cdfa.ca.gov.