Ensuring Food Safety in the Vineyard: Wine Grapes

Introduction
Grapes must be unadulterated and safe for consumption, this includes grapes that are produced for wine. Two different United States (U.S.) Federal Acts govern the safety of grapes-The Food Safety Modernization Act and the Food, Drug, and Cosmetic Act. Both of these Acts are regulated by the U.S. Food and Drug Administration.

Food, Drug, and Cosmetic Act of 1938
The Food, Drug, and Cosmetic Act (FD&C) is a set of laws passed by Congress in 1938 giving authority to the U.S. Food and Drug Administration (FDA) to oversee the safety of food, drugs, and cosmetics. This set of laws prohibit the introduction, sale, or delivery of adulterated food into commerce (in state and/or across states). Adulterated food is food that contains human pathogens or toxins, pesticide residues above the legal limits, and/or foreign objects (i.e. glass, metal, plastic).

The Food Safety Modernization Act of 2011
The Food Safety Modernization Act (FSMA) was signed into law in 2011 and focuses on preventing the contamination of food with foodborne pathogens across the entire food system. FSMA includes seven major rules, recognizing that food safety is a shared responsibility. The FSMA Produce Safety Rule provides guidance to growers on standards for the safe growing, harvesting, packing, and holding of fruits and vegetables grown for human consumption. While all growers must take proper steps to reduce food safety risks, the Produce Safety Rule does not apply to all crop types or products. The Produce Safety Rule provides an exemption for produce that receives commercial processing that adequately reduces foodborne pathogens of public health significance. Vineyards with wine grapes intended for wine production fall under this exemption if documentation from the buyer is obtained. This documentation states that the buyer has established protocols to adequately reduce the presence of microorganisms, through fermentation or another type of kill step [§112.2(3) and (4)]*. Documentation is required for each buyer and must be obtained for each new crop (i.e. annually). The grower must also have documentation that traces the wine grapes through the wine production process.

What FD&C Says
SEC. 301. 21 U.S.C. 331
The following acts and the causing thereof are hereby prohibited: 1 (a) The introduction or delivery for introduction into interstate commerce of any food, drug, device, tobacco product, or cosmetic that is adulterated or misbranded. (b) The adulteration or misbranding of any food, drug, device, tobacco product, or cosmetic in interstate commerce. (c) The receipt in interstate commerce of any food, drug, device, tobacco product, or cosmetic that is adulterated or misbranded, and the delivery or proffered delivery thereof for pay or otherwise. (d) The introduction or delivery for introduction into interstate commerce of any article in violation of section 404, 415, 505, or 564.
What FSMA Produce Rule Says
Vineyards are exempt from the FSMA Produce Safety Rule if the grapes they grow receive according to §112.2 (b)(1): “commercial processing that adequately reduces the presence of microorganisms of public health significance. Examples of commercial processing that adequately reduces the presence of microorganisms of public health significance are processing in accordance with the requirements of part 113, 114, or 120 of this chapter, treating with a validated process to eliminate spore-forming microorganisms (such as processing to produce tomato paste or shelf stable tomatoes) and processing such as refining, distilling, or otherwise manufacturing/processing produce into products such as sugar, oil, spirits, wine, beer or similar products.”