Title 3. DEPARTMENT OF FOOD AND AGRICULTURE

Division 4. Plant Industry

Chapter 2. Field Crops

Subchapter 5. Rice Identity Preservation

INITIAL STATEMENT OF REASONS/ POLICY STATEMENT OVERVIEW

PROBLEM STATEMENT, ADMINISTRATIVE REQUIREMENT, OR OTHER CONDITION OR CIRCUMSTANCE THE PROPOSED REGULATIONS ARE INTENDED TO ADDRESS

The proposed regulations are intended to address the obligation of the Department of Food and Agriculture (Department) to protect the agricultural industry from the movement and spread of injurious plant pests within California.

NECESSITY

Food and Agricultural Code (FAC), Section 403, provides that the Department shall prevent the introduction and spread of insect or animal pests, plant diseases, and noxious weeds. FAC, Section 407, further provides that the Secretary may adopt such regulations as are reasonably necessary to carry out the provisions of this code which she is directed or authorized to administer or enforce.

The California Rice Certification Act of 2000 (Act), commencing with FAC, Section 5500 et al., was established to protect and maintain the high quality of rice produced, processed or handled in this state. The Act permits the industry to establish terms and conditions for the production, processing and handling of rice, in order to achieve the goal of preventing potential commingling of various types of rice, and to prevent commingling where reconditioning is infeasible or impossible.

Pursuant to the Act, the Rice Certification Committee (Certification Committee), nominated by the California Rice Commission (Commission) and appointed by the Secretary, shall identify rice varieties that have characteristics of commercial impact and recommend to the Secretary that regulations be adopted, amended or repealed to accomplish the purposes of the Act, including, but not limited to: maintaining the integrity and preventing the contamination of rice; prevent the introduction of diseases, weeds or other pests; ensure enforcement of terms and conditions imposed pursuant to the Act regarding planting, processing or handling of rice; and encourage research and development of new types of rice. (FAC, Sections 55020, 55040 and 55047)

Upon the receipt of recommendation from the Certification Committee for the promulgation, amendment, or repeal of regulations, the Secretary shall within 30 working days do one of following: (1) initiate the rulemaking process with the regulations as recommended; (2) decline to initiate the rulemaking process; or (3) request that the committee provide additional information regarding the recommended regulations. (FAC, Section 55022)

In 2004, the Certification Committee recommended and the Secretary initiated a rulemaking process that created the Rice Identity Preservation regulations as published in the California Code

of Regulations. This set of regulations established protocol for the production and handling of specified rice varieties, which preserved California rice integrity and high quality. (California Code of Regulations, Title 3, Division 4, Chapter 2, Subchapter 5, Section 2850 et al.)

FACTUAL BASIS AND SPECIFIC PURPOSE

In California, it has been confirmed by the Certification Committee that weedy rice has rapidly spread to every rice producing county in the Sacramento Valley and San Joaquin County since it was first discovered in 2006 in a 156 acre rice field, and now is infesting at least 10,000 acres.

Weedy rice is one of, if not the most harmful weeds impacting rice growing regions throughout the world.

Weedy rice has a vigorous growth that makes it a competitor for space and resources, and when present in cultivated rice fields, rice yields will unavoidably be reduced. In addition, weedy rice has an abnormal reproductive cycle in which seed production (heading) may occur over a prolonged period of time producing seeds that disperse (shatter) easily at maturity. A single weedy rice plant left in a field can result in several hundred plants the next year and thousands of plants the year after. Weedy rice seed also exhibits dormancy of up to 10 years adding significantly to the challenge of developing an effective control strategy.

Weedy rice is also a cause of concern at rice mills. The presence of weedy rice in incoming paddy rice can lower the grade of milled rice. Removing the weedy rice seeds at the mill may be done by using optical sorters and additional milling, which increase the cost to the miller and result in a reduced price for the producer.

In Arkansas, a 2008 survey showed that 62% of fields are infested with weedy rice. In the Southern United States, high infestation of weedy rice has resulted in yield reductions over 60%. These rice growing regions manage the infestation through herbicide resistant rice varieties and rotation with herbicide resistant crops. However, such control measures are not available in California.

In the summer and fall of 2016, five strains of weedy rice were identified in rice fields throughout all rice growing counties in the Sacramento Valley and San Joaquin County. Knowing the potential impacts of weedy rice, the California rice industry took immediate action and drafted emergency regulations that addressed management practices. On November 30, 2016, the emergency regulations were approved by the Certification Committee in a unanimous vote.

On January 10, 2017, the California Rice Commission (Commission) submitted an emergency regulatory package to the Department. On January 12, 2017, the Department followed up requesting additional documentation. Between January 12, 2017 and February 10, 2017, the Commission worked closely with the Department to develop a complete emergency regulatory package which was officially submitted to the Department on February 14, 2017, and posted by Office of Administrative Law (OAL) on March 13, 2017. The emergency regulations took effect March 13, 2017. The proposed regulations will permanently adopt the emergency regulations.

California is one of the top rice producing states in the country and the leading medium grain rice producer in the U.S. A 2010 report by Texas A&M University, concluded that the California rice industry directly contributes \$910.85 million to California's economy, and indirectly contributes another \$322.07 million. That same report found that the California rice industry provides 7,772 direct jobs, and 1,381 indirect jobs.

Weedy rice has the potential to seriously impact this economic activity. Accordingly, the Department has determined that it is necessary to amend and add to the existing Rice Identity Preservation regulations (California Code of Regulations, Title 3 Division 4, Chapter 2, Subchapter 5, Section 2850 et al.) to add provisions for the prevention and eradication of weedy rice.

The purpose of the proposed regulations is to ensure the eradication and prevention of further infestation of weedy rice in California by making the emergency regulations permanent.

The purpose of each section being amended or added is as follows:

Section 2850, Terms and Definitions

For clarifying and clean-up purposes, the proposed regulations delete subheading (f) "Basic Seed", and add "Basic Seed" to subheading (e).

The proposed regulations add subheadings (f) through (n), to include definitions for language used in Section 2852.5.

Section 2851. Production and Handling of Conventionally Bred Specialty Rice

Since the initial adoption of this section which listed specific varieties of rice as conventionally bred specialty rice, additional varieties of rice were identified by the industry and are updated here to provide a comprehensive list of varieties subject to this section. These added varieties will be subject to the specific production and handling requirements described in this section. It was determined by the Rice Certification Act Committee that these added varieties have commercial impact.

The proposed regulations within Protocol section (c) replace "at a reasonable time" with "within 15 days" to define the requirements of compliance and replace less specific language previously in regulation.

Section 2852. Production and Handling of Colored Bran Rice

Since the initial adoption of this section which listed specific varieties of rice as colored bran rice, additional varieties of rice were identified by the industry and are updated here to provide a comprehensive list of varieties subject to this section. These added varieties will be subject to the specific production and handling requirements described in this section. It was determined by the Rice Certification Act Committee that these added varieties have commercial impact.

The proposed regulations within §2852 (a)(1)(D) were changed to eliminate specific language which could be read to be inconsistent with the definition of foundation and basic seed which specifies the manner in which both are produced. Seed production requirements are now defined by the regulatory requirement to produce certified seed or seed under a third-party quality assurance program approved by the committee in Section 2852.5.

The proposed regulations in 2852 (a)(2)(B) were changed to add timing of actions required under regulations, in order to ensure they are taken prior to the plant reseeding.

The proposed regulations in §2852 (a)(2)(D) add language to clarify the timing and frequency of the actions required under regulation.

The proposed regulations in §2852 (b) add specific language to define the requirements of compliance and replace less specific language previously in regulation.

Section 2852.5, Prevention and Eradication of Weedy Rice

Section 2852.5 is added to establish protocol for the prevention and eradication of weedy rice. The single most effective tool in the eradication of weedy rice is planting uncontaminated seed. The proposed section implements this tool by mandating inspection of planting and harvesting equipment used in another rice producing state and brought into California; prohibiting the sale of farm saved seed to other producers; requiring producers to plant farm saved seed solely for the purpose of rice to be milled or processed; requiring producers to only use seed that has been enrolled in a certification program by a member of an Association of Official Seed Certifying Agency or is subject to a third party quality assurance program; and requiring verification of planting certified seed or seed enrolled in a quality assurance program approved by the Certification Committee.

The proposed regulations in 2852.5(a)(1)(A) address the potential for weedy rice seeds to be transported on equipment brought in from other states where the pest is prevalent.

The proposed regulations in §2852.5 (a)(2)(A)-(D) require that all seed sold in California be a class of certified seed or enrolled in an approved third-party quality assurance program. These practices are known to be essential in controlling and eradicating weedy rice, which is primarily spread through contaminated seed.

Associated dates within §2852.5(a)(2)(A)-(D) are dates of compliance which allow producers sufficient time to enroll in a certification or third-party program, and which require a 2-year effort to achieve certification, while still using farm saved seed.

The proposed regulations in §2852.5 (a)(3)(A) and (b) ensure that only certified seed or seed that is enrolled in a third-party quality assurance program are planted thereby eliminating the most common method for the spread of this pest.

Section 2853. Scope of Coverage

The proposed regulations make minor amendments to clarify and clean-up the regulatory language.

Section 2854. Filing Deadlines and Procedures

The proposed regulations make minor amendments to clarify and clean-up the regulatory language.

Section 2855. Informal Hearing Schedule and Notification

The proposed regulations make minor amendments to clarify and clean-up the regulatory language. **Section 2856. Conduct of Informal Hearing**

The proposed regulations make minor amendments to clarify and clean-up the regulatory language.

ECONOMIC IMPACT ANALYSIS

The Department has made the initial determination that the proposed regulations would insignificantly impact the creation or elimination of jobs, the creation of new businesses, the elimination of existing businesses, the expansion of businesses currently doing business within this state and would insignificantly affect a private person or business and will not impact the ability of California businesses to compete with businesses in other states, or on representative private persons. This initial determination has been determined by the following analysis of the potential costs involved with reasonable compliance with the proposed action:

- 1. The cost to the industry is insignificant. The industry farm gate value in 2015 was \$752 million (CDFA's 2015-2016 Agricultural Statistics Review). The anticipated industrywide cost-increase is less than one percent (0.37%) of that farm gate value. The total cost to the industry is approximately \$2,805,000.
- 2. Rice producers who sell farm saved seed may incur a minimal cost. There are about 2,500 rice producers in California and approximately 20% (500 producers) have farm saved seed. The majority of these producers did not grow the farm saved seed with intent to sell the seed for income, so the cost incurred is insignificant.
- 3. Producers that intended to use farm saved seed will incur an additional cost, however, this is minimal. Certified seed or seed from a quality assurance program, costs \$15 per hundred pounds more than farm saved seed. 170 pounds of seed is applied per acre. The additional cost is \$25.50 per acre. Last year, the average cost for farm saved seed was \$18.37 per acre. The average rice producer has 350 acres. Last year, the approximate total cost for a rice producer using farm saved seed was \$6,429.50. The approximate cost to be incurred by rice producers who intended to use farm saved seed but must use certified seed is \$8,925.
- 4. The direct costs of enrolling in a seed certification program are consistent with a similar certification program operated by the California Crop Improvement Association that charges the following fees for its services: \$100 application fee; \$3.50 per acre for foundation seed; and \$2.50 per acre for certified seed.
- 5. A rice producer who intended to use his/her own farm saved seed will incur a lot certification fee of \$0.08 per hundred pounds for certified seed plus a \$2.50 per acre application fee. Based on average yields of 8,300 pounds per acre the calculated additional cost is \$0.11 cents per hundred pounds of certified seed, if only one acre of seed is produced. The current value of grade seed (non-certified) would be assumed to be the same as paddy rice which is priced today at \$13.00 per hundred pounds.
- 6. Indirect costs of agronomic practices required under seed certification programs are considered by industry to be appropriate seed production practices and likely are already employed by all breeding programs.
- 7. The California Rice Commission is responsible for enforcing the regulations. Based upon the Department's review of cost associated with enforcing the Rice Identity Preservation regulation, the Department has determined that no additional costs will be incurred by the Commission for the enforcement of the proposed regulations.

This economic analysis displays the minimal costs that are possible to the rice producer reasonably complying with these regulations. It has been determined that costs to the industry are less than 1% and therefore the ramifications of complying with these regulations would not cause an economic hardship influencing the creation or elimination of jobs within the industry due to the insignificant increase in costs. It has also been determined that out of the 2,500 California rice producers, about 20% of producers save farm seed and even less than this 20% sell that seed, causing the economic impact of eliminating the

sale of farm saved seed to be an insignificant loss of income to the individual producer and an insignificant impact to the overall industry.

The additional potential impact to the industry are the costs of enrolling in a seed certification program which are also noted as insignificant to the rice producer and would not incur an economic hardship influencing the elimination of businesses, the creation of new businesses, the elimination of existing businesses, the expansion of businesses currently doing business within this state and would insignificantly affect a private person or business and will not impact the ability of California businesses to compete with businesses in other states, or on representative private persons because the cost to enroll in a seed certification program is a minimal cost and the added cost to buy certified seed is insignificant as noted in the examples noted above.

BENEFITS OF THE REGULATIONS

The eradication and prevention of further infestation of weedy rice benefits the California rice industry which provides for economic benefits to the people of this state including possible job creation opportunities. The continuous marketing of rice as an essential food nutrient promotes good health and wellness to the public. Therefore, the benefits derived from the proposed regulations will create a positive impact to the health and general welfare of the people of California.

CALIFORNA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), provides for an exemption to the Environmental Impact Reporting and/or Negative Declaration requirement in the case of emergencies as emergency is defined in the Public Resources Code (PRC), Division 13, Chapter 2.5, Section 21060.3 and for discretionary projects as described in Chapter 2.6, Section 21080 (b) (4). This specific regulatory action, therefore, is not the beginning of a project as defined in the PRC, Division 13, Chapter 2.5, Section 21065. Further, this regulatory action is consistent with legislative declarations contained in the Government Code, Title 5, Division 1, Part 1, Chapter 7, Article 2, Section 51220, which states "the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation."

STATEMENTS OF DETERMINATION

<u>Alternatives Considered:</u> The Department has determined that no reasonable alternative it considered or that has otherwise been identified and brought to the attention of the Department would be more effective in carrying out the purpose for which the action is proposed. In addition, the Department has determined that no reasonable alternative would be as effective or less burdensome to affected private persons than the proposed action or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

The forgoing is based on the Department's evaluation of alternatives as provided by industry and a public comment received during the emergency regulatory process.

During the development of the proposed regulations, the rice industry and the Department considered voluntary compliance as an alternative to the proposed regulations. However, because weedy rice can spread so easily, the Department has determined that voluntary compliance is not a viable alternative

because the decision of one rice producer to not voluntarily comply could have a significant impact on the entire rice industry.

A public comment asserted that the proposed regulations do not provide for the removal of weedy rice plants from rice fields. The Department has determined in accordance with the University of California Cooperative Extension that the best management practice for the removal of weedy rice from rice fields is planting uncontaminated certified seed which is included in the proposed regulations.

A public comment proposed that the Department adopt a "Tier 3 Commercial Impact" to address the movement of rice contaminated by weedy rice. Current regulations provide for the classification of rice as non-commercial impact or Tier 1 Commercial Impact or Tier 2 Commercial Impact. Production and handling practices are required to limit co-mingling of rice with dissimilar tiers. The Department determined that adding a Tier 3 Commercial Impact to address the movement of rice contaminated by weedy rice would only address the movement of rice after it is grown. The proposed regulations implement the most effective tool to eradicate weedy rice which is the planting of uncontaminated seed.

<u>Local Mandate Determination</u>: The Department has determined that the proposed regulations do not impose a mandate on local agencies or school districts, nor are there any costs for which reimbursement is required by Government Code. Section 17500 et al., except that county agricultural commissioners must inspect rice production equipment that has been used in another rice producing state and brought into California. Based upon meetings between the Commission and county agricultural commissioners, the Department confirmed that no costs will be incurred for conducting the inspections.

<u>Economic Impact Statement:</u> The Department has made the initial determination that the proposed regulations would not have a significant statewide adverse economic impact directly affecting businesses including the ability of California businesses to compete with businesses in other states, or on representative private persons. This determination was made based on the evidence that confirmed weedy rice could have a devastating impact on the California rice industry. The proposed regulations eradicate and prevent further infestation of weedy rice, therefore protecting the California businesses from potential loss in rice yields and economic impacts associated with lower yields.

<u>Effect On Small Businesses:</u> The Department has made the initial determination that the proposed regulations will have a minimal statewide adverse economic impact directly affecting businesses that will not impact the ability of California businesses to compete with businesses in other states, or on representative private persons. An initial determination has been made that there is no impact because as the additional costs to California rice producers is minimal, as described in the Economic Impact Analysis.

<u>Housing Costs Determinations</u>: The Department has made the determination that the proposed regulations would have no impact on housing costs.

<u>Inconsistency Or Incompatibility With Existing Regulations</u>: The Department has determined the proposed regulations are not inconsistent or incompatible with existing state regulations.

RELIED UPON DOCUMENTS

The Department has relied upon the following information:

1. "Economic Contributions of the US Rice Industry To the US Economy," Texas A&M, Agricultural and Food Policy (2010)

2. "Red Rice (*Oryza Sativa*) Emergence Characteristics and Influence on Rice Yield at Different Planting Dates," Weed Science 57 (January-February 2009)

3. "Weedy (Red) Rice: An Emerging Constraint to Global Rice Production," Advances in Agronomy, First Edition (2015)

4. "Clearfield Rice: Its Development, Success and Key Challenges on a Global Perspective," Crop Protection 49 (2013)

5. "Buried Red Rice Seed," Journal of the American Society of Agronomy (July 1939)

6. "Weedy Red Rice Update," California Crop Improvement Association, http://rice.ucanr.edu/files/229841.pdf

7. "Red Rice Pictures," California Rice Research Board, http://www.carrb.com/Facts/RedRice.html