

# California Citrus Quality Council (CCQC)

## Quality Assurance Program

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As specifically provided for in the California Citrus Improvement Program marketing order, this ongoing Quality Assurance Program is conducted by the California Citrus Quality Council (CCQC) under an operating agreement with the California Citrus Research Board.

CCQC's mission is to represent the California citrus industry in response to problems and issues which arise in state, national, or international arenas and which affect the industry generally in areas of quarantine matters, technical assistance, food safety, international compliance, or other related issues. CCQC is pro-active and always maintains a science-based approach to the issues relating to the state's citrus industry.

The objective of the program is to furnish citrus growers and their shippers with technical information and procedural guidance to assure the marketing of citrus fruit that complies with the chemical residue, food safety, phytosanitary and labeling requirements of the U.S. and all importing countries.

### REGISTRATION ACTIVITIES

- **2,4-D Isopropyl Ester (2,4-D-IPE) Formulations for Use as a Plant Growth Regulator on Citrus:** In the early 1990s, the registrants of the two formulations were informed that cancellation of the 2,4-D products would take place in the very near future unless studies specified by the U.S. EPA were performed, following which re-registration would be approved or denied. The registrants informed our citrus industry that they were not prepared to go through the expense of re-registration.

At the request of the California citrus industry, CCQC agreed to coordinate such studies if the California citrus industry would provide the necessary funds. In turn, the registrants agreed to continue to keep these two formulations in the market place until U.S. EPA made its re-registration decision. In addition, U.S. EPA agreed to permit the sale of these formulations during the re-registration process. Also, the registrants agreed to pay a license fee to CCQC based on the amount of product sold. The effective dates of the agreements between CCQC and the registrants were in January 1993 and December 2000.

A total of 26 studies were required. The cost to carry out the studies and support acceptance of the studies by the U.S. EPA and Codex exceeded \$2 million. *We are very pleased to announce that all 2,4-D active ingredients have been re-registered effective in the U.S. and at the international level under Codex.*

The project has received some financial support from Arizona, Texas and Florida citrus interests and from the South African citrus industry. The South African citrus industry is supporting the tolerance for 2,4-D in the European Union (EU) that will also allow California citrus entering EU countries to carry a 2,4-D residue. The major source of funds returned to CCQC, and thus to the California citrus industry, is due to the license fees for three registrants. All together, slightly less than \$1.1 million have come to CCQC from all of these sources. As long as the registrants continued to sell 2,4-D IPE formulations supported by CCQC data, they will continue to send license fee payments to CCQC until all re-registration expenses incurred have been met.

- **SOPP:** The CCQC data support program for registrations of citrus pesticides was expanded in 1993 to save SOPP. Registration at EPA was not supported by Dow Chemical, the manufacturer. Since then, CCQC generated and submitted data required for re-registration of the postharvest fungicide SOPP/OPP before both the U.S. EPA and the Codex Committee on Pesticide Residues (CCPR).

The citrus fruit MRL for SOPP was reviewed by the CCPR committee. The 10 ppm level current in Codex was maintained. The tolerances for SOPP are currently under review by the EU. We were contacted by Dow, one of the chemical registrants in the EU, and licensed them to use our data for supporting citrus tolerances in the EU. The review process in the EU is currently in transition with the date of final approval still in question.

- **Hydrogen Cyanide:** Sodium cyanide treatments, which result in residues, are used to fumigate citrus bound for Arizona in order to control red scale. CCQC worked with the registrant, Washburn & Sons, to maintain the tolerance and use for citrus. EPA published their complete review in 2007. Although a few additional studies are required to be carried out in the next two years supported by the registrant, our use of this fumigant is allowed to continue while the data is being generated without additional restrictions.

## GENERAL ISSUES

- **Commodity Coalitions:** Coalitions were crucial to California citrus during the implementation of the Food Quality Protection Act (FQPA). Through the president's representation on the Minor Crops Farmer Alliance (MCFA) Executive Committee and as the Chairman of the International Subcommittee of MCFA, CCQC continues to provide input into EPA to reflect the needs of the citrus industry during the implementation of FQPA and the registration review phase that started this year.

Recent changes in the international regulation of methyl bromide have resulted in our joining the Crop Protection Coalition. This coalition represents commodities on Methyl Bromide issues at federal and international levels. Although our major use of this chemical has been in quarantine treatments that are currently exempted from phase-out, the EU and environmental organizations are moving to limit these quarantine uses. This year's international meeting of the parties to the Montreal Protocol will review critical requirements that could restrict quarantine uses. In Australia and Japan, methyl bromide is the only fumigant that is approved for use on citrus upon arrival to control the quarantine pests that are reported to be on our exported fruit.

- **EPA Regulatory Decisions:** In order to convey accurate information on the practices of the citrus industry to key EPA officials, a California citrus crop tour was held early in 2003 and the next tour is being planned for early in 2008. CCQC feels that a tour focusing on citrus accurately conveys the diversity of geographic and cultural practices to regulators. Tour participants from the 2003 tour are frequently involved in the current review process for new and existing pesticides that are used on citrus.
- **California Regulations:** Proposition 65 has raised issues for the citrus industry in California. CCQC has worked with registrants, other commodity groups and the Office of Environmental Health Hazard Assessment (OEHHA) to prevent the listing of pesticides reviewed in the past. Recently, several pesticides of importance to our citrus production have been mentioned as candidates for review under Proposition 65. Although the exact outcome of their process for these important chemicals is uncertain, CCQC is working with others in the citrus industry to protect our uses of these chemicals and prevent formal listing under Proposition 65.

## INTERNATIONAL ISSUES

- **Codex:** The international standards for pesticide tolerances under the terms of the World Trade Agreement (WTO) are set by the Codex Committee on Pesticide Residues (CCPR) and approved by the Codex Commission. CCQC is a member of the U.S. delegation to the CCPR. The CCQC president initiated a process to expedite the establishment of tolerances for new pesticides in coordination with other commodity representatives. Since procedures in the past took up to eight years to establish Maximum Residue Limits (MRLs) on a new pesticide after its registration in the U.S., new pesticides could not be recommended by CCQC for use for many years due to the lack of Codex and or individual country MRLs.

At the Codex Commission meeting in 2006, an expedited tolerance setting process for pesticides was established based on input by CCQC and other commodities representatives working with the U.S. delegation to the CCPR. This new process can establish an MRL in less than two years after the data is submitted by the registrant. At the 2007 meeting of the CCPR, the expedited process for setting international Codex standards was used for nearly all the new pesticides under review. The recent decisions by the Japanese and Taiwan governments and the new proposals by Hong Kong and the European Union to set up new regulatory systems that include partial deferral to Codex tolerances are additional examples of the importance of Codex standards being set as soon as possible after registration is completed in the U.S.

Based on the application submitted by CCQC, the Codex Alimentarius has granted the International Society of Citriculture (ISC) observer status as an International Non- Governmental Organization in the Work of the Codex Alimentarius Commission and its subsidiary bodies including the committees. Attendance at two committees, the Codex Committee on Pesticide Residues (CCPR) and the Committee on Food Additives and Contaminants (CCFAC), under the ISC flag has allowed us to provide additional critical input on California citrus issues that would have been impossible for representatives sitting in the U.S. delegation.

- **Barriers in Export Markets:** As importing countries raise issues about citrus sent from California, CCQC must be ready to meet with visiting importing country foreign officials and secure the necessary resources to bring these officials and scientists into California for face-to-face visits with the industry and regulators when necessary. Maintenance of existing markets requires rigorous attention to new pest, disease, pesticide and food safety issues that affect trade. Research to evaluate pest risk claims in export market countries was recently added to this project.

The industry is also required to host several Korean inspectors for on-site monitoring. The inspectors visit packinghouses, tour orange blocks and observe harvest operations to assure that we are meeting the requirements set forth in the work plan. For the past three years, CCQC has been receiving grants from the USDA to support many of the expenses in implementing these work plans. The number of *Septoria* detections in Korea has decreased from 47 finds in the 2004- 05 crop season to only two detections last season showing the success of the sprays and testing that were developed by Dr. James Adaskaveg of the University of California at Riverside.

- **Export Markets Requiring Work Plans for Entry:** Both Korea and Australia require work plans for oranges to be exported from California. Korea shut down our exports of oranges in April 2004 due to detections of *Septoria citri*, a disease that is claimed not to be present in Korea. After negotiations were conducted in Korea with input by CCQC and CCM, work plans are in place to keep this organism off our oranges and to allow continued shipments through the orange season. The work plan agreed to by U.S. and Korean regulators requires copper-zinc-lime sprays to be applied to each grower block in the program. Testing for *Septoria* is also required on a periodic basis before any block from Tulare and Fresno can be granted a phytosanitary certificate.

The Australia work plan is designed to prevent bean thrips from being present in the navel of navel oranges exported to Australia. A program designed by Dr. Joseph Morse to trap in the field has been successful in reducing bean thrips interception, but further work is underway. A preclearance program started in the 2004-05 season has been expanded to represent nearly half of all orange shipments to Australia as well as a high percentage of lemons and other varieties. Preclearance has also been successful in reducing overall detections of quarantine pests.

CCQC has managed the programs under the work plans for Korea and Australia from their inception and continues to work toward improvements and toward increased eligibility of our citrus to meet the phytosanitary standards requirements in these two countries.

- **Pesticide Use and Residue Issues in Export Markets:** Based on the experiences of the last few years, a few key export markets are requiring information on pesticide use and crop residues in order to answer consumer and retail chain concerns. A specific targeted program will be carried out to determine whether we have residues that exceed the standards in key export markets. Japan is one country where recent changes in the pesticide limits resulted in violations by two California packinghouses.

The choice of chemicals to be tested will be based on market dynamics in key markets and the differences between the U.S. and importing country's standards. This database will be augmented by data that can be obtained from governmental and industry sources. In addition, a pest management schedule will be updated for major California citrus crops by production region. This information will be provided to marketers to share with retail customers and regulators in export countries.

- **Export Manual:** The need by the citrus industry for web-based user-friendly information, including the requirements set by key importing countries, is a priority. The CCQC export manual is being expanded to cover 25 pesticides for 40 export markets. Data on food additives, solid wood pack-aging material, specific critical pesticides and the technical requirements for citrus exports is also provided on CCQC's website at [www.citrusresearch.org](http://www.citrusresearch.org). Updates to the standards on this website are provided on a weekly basis to assure that shippers have the most current data available. Additional information on pesticide standards in additional markets may be accessed at <http://mrl1database.com>, a web site maintained by the USDA's Foreign Agricultural Service and the EPA.
- **Pest Prevention:** The expansion of imported citrus raises new issues of introduced pests and their management. Many federal, state and foreign agencies play key roles in assuring the protection of California production. Organizations such as the North American Plant Protection Organization (NAPPO) are key for the coordination of these activities between Mexico, Canada and the U.S. CCQC will continue to participate in NAPPO meetings and work toward improving protection from invasive diseases for California citrus and other commodities.

With the arrival of citrus canker and citrus greening diseases in Florida, CCQC has been very involved in the process of containment of these diseases. The USDA/APHIS has published proposed requirements for shipments of citrus from Florida. CCQC had submitted comments to APHIS that included input from experts on these diseases from around the world. The presence of the vector for citrus greening, the Asian citrus psyllid, in Texas and in five states of Mexico places California in a very high risk status. CCQC is also participating in a California task force to monitor citrus greening and to encourage both our industry and regulators to take all necessary steps to prevent the entry of citrus greening and its vector from Florida, Mexico and Hawaii.

- **North American Free Trade Agreement (NAFTA):** Under the terms of this agreement, a technical work group is working on harmonizing the pesticide registration processes for Mexico, Canada and the U.S. Meetings are held one to two times per year in one of the three countries to discuss registration issues including joint registration. Registrant and commodity input has been sought and CCQC serves on one of the subcommittees. Policy issues in the past have been modified and improved based on commodity input.

Activity on Canada's regulatory system has increased as their government prepares in 2008 to eliminate the 0.1 ppm default tolerance that has existed for many years. We are currently working with other commodities in the Minor Crop Farmer Alliance (MCFA) to harmonize tolerances between Canada and the U.S. U.S. commodity representatives are generating a matrix that shows the tolerance differences between the U.S. and Canada for each crop and will work with both the U.S. EPA and the Canadian JMPR to identify priority gaps and to work to resolve them.

- **Federal Agriculture Trade Advisory Committee:** The President of CCQC has been serving on the Agricultural Trade Advisory Committee (ATAC) of the U.S. Department of Agriculture. The Committee is playing a pivotal role in defining the position of U.S. trade negotiations for the current round of multilateral trade negotiations under WTO and in various Free Trade Agreements. Agriculture has been elevated to the major area of negotiations in both the WTO and Free Trade Agreement talks in many countries.

## OTHER ISSUES

- **Food Safety and Security:** Recent issues on the safety of leafy greens have led to an exponential increase in retail chain interest in microbial food safety. The lead agency on most produce items, the Food and Drug Administration, has received input from commodity organizations and trade associations such as United Fresh. CCQC participates in an ad hoc group of tree fruit commodity representatives that address food safety policy issues.

European retail chains have been on the cutting edge of the most restrictive requirements for Good Agricultural Practices (GAP's) and Good Manufacturing Practices (GMP's) and appear steadfast in their efforts to move these requirements to their U.S. suppliers. Surveillance of their requirements may need to be increased in order to generally prepare California citrus for the European Union (EU) and other markets influenced by EU retail standards.

- **Food Additives at Risk:** Recent changes to Food Law and Regulations in nations such as Japan and at the international level under Codex regarding food additives has prompted increased attention by CCQC. Formal coalitions to address these issues are lacking at this time. CCQC promoted the regulatory status of carnauba wax and esters of wood resin for citrus coatings at Codex. We addressed these issues in cooperation with service companies and pome fruit representatives.

- **Consulting Services:** As partial compensation for the countless hours expended by the Chairman of the Board of CCQC chairing meetings, reviewing all minutes and providing valuable institutional knowledge to CCQC management, a consulting fee is paid. The Chairman, Dr. Charles Coggins, has also taken on additional projects in the area of EPA chemical reviews, Codex and SLN registrations.

**NOTICE:** The research results included in this publication are summary reports for the benefit of the Citrus Research Board and the growers it serves. They are not to be taken as recommendations from either the individual reporting or the agency doing the research. *Some of the materials and methods mentioned are neither cleared nor registered for commercial use. The summaries were written by the project leaders identified. Both technical names and registered trademarks of materials are used at the discretion of the authors and do not constitute any endorsement or approval of the materials discussed.* Questions on possible applications should be directed to the local University of California Extension Specialist, a licensed PCA, or the appropriate regulatory agency.