Ethylene Control, Inc. is a relatively young firm, but in our success we've developed customers in every corner of the nation and in many countries around the world. We value our relationships and we will take every precaution to assure that you get the very best in products and service in a timely manner.

Ethylene Control is always interested in your comments regarding any of our products. Please share your experiences with me personally by calling me at 1-800-200-1909 or fax (209) 896-3232.

Upcoming Events

Tree Fruit Expo - October 4 - Richland Sales, Dinuba
PMA - October 15-17 San Diego, CA
AgFresno - November 15-17 Fresno District Fairgrounds

Fresh Perspectives Opens Communications

*Fresh Perspectives* is the beginning of a regular communication program between Ethylene Control Inc. and the hundreds and thousands of fresh fruit and vegetable growers, packers, handlers, shippers, repackers and other aligned with food services. This newsletter will be published on a regular basis and expect it will become a source of good information for the industry.

Ethylene Control will feature a wide variety of individual profiles on important industry figures. We hope to get to know some of you better, and in the process, help you to more fully understand our role in helping deliver the very freshest fruits and vegetables to the consumer as possible. A newsletter like "Fresh Perspectives" will be done in a professional manner and the information presented here will be handled with the highest level of integrity and honesty.

If you have information concerning new developments or innovations that you believe qualifies for publication, please pass it along to our editors and we will consider it for use in future issues. Likewise, if your company is sponsoring a special industry-wide event, please let us know well in advance so we can consider it for our calendar of events.

Shamrock Foods Educates Their Customers on Freshness

Don C. Middaugh, Produce Marketing Director for some half dozen Western states for Shamrock Foods in Denver, first saw the Ethylene control filters at the Produce Marketing Association (PMA) convention when it was held in Monterey, California. He was excited by the potential applications he saw in the food service industry.

"I knew that the EC filters were used in long-haul trucks and on ocean cargo ships to control the ripening process cargo ships to control the ripening process of fruits and vegetables, but no one had ever really looked into the food service industry and its many related areas of use," he said.

Since the, Shamrock Foods has expanded its food service team that puts on seminars for hotel restaurant, grocery store and hospital food services to explain the importance of "fresh produce management."
Middaugh's presentation, called "The Fresh Approach," educates store operators and produce handlers in the proper way of storing and handling fruits and vegetables to assure freshness by using Ethylene Control products. Shamrock placed emphasis on controlling ethylene gas to give their customers an additional three or four days to serve or sell their produce.

The filters also absorb odors. The Power Pellets are much more effective than the old baking soda method. Occasionally, prepared deli items can contaminate everything else in the cold box.

Shamrock has been selling EC's "FreshPak" sachets and filters to hospitals nursing homes, school cafeterias, restaurants and hotels. "Unless controlled and managed properly, ethylene gas is a real detriment to fresh produce," Middaugh said. "EC filters remove the majority of the ethylene and extends the shelf life of the fruit or vegetables stored in the cold box. We will help our customers serve higher quality food by making educating the customers a priority.

"Adams County Five Star School District in Thornton, Colorado used the EC filters in their walk-in cold box and discovered that they no longer had to throw away large amounts of produce on Monday mornings because it didn't spoil over the weekend as it had in the past. Ethylene Control helped stretch the district's food budget," he said.

New Products & Uses

Ethylene Control has developed the 5-gram "FreshPak" sachet for a 15-pound box of fruit. EC responded to a demand for products to handle the traditional 7-pound flat of kiwifruit, the 12-pound single layer pack of stone fruit and the 11-pound carton of mangos.

Some fruits give off more ethylene than others. The worst are peaches, nectarines, papaya, pears, apples, apricots, avocados, and cantaloupes.

The fresh cut flower market fostered the development of the new 40-gram 'FreshPak," designed for exclusive use in floral cases. Flowers don't give off very much ethylene, but it is important to keep levels as low as possible because most cut flowers are very sensitive to ethylene gas.

San Antonio's Delta Produce Solves Melon Woes

"We were experiencing deterioration and incredible losses in our watermelons," said Scott Jensen of Delta Produce Marketing in San Antonio, Texas. "There wasn't too much known about ethylene and its affect on the fruit at that time." Delta Produce is a repack operation that specializes in watermelons, chili peppers, pumpkins, avocados and tomatoes. Occasionally, they handle some leafy greens grown locally. During the peak of the season, the crews at the 130,000 square-foot facility handle approximately 1,200 truckloads of melons and 2,000 truckloads of tomatoes from May through October.

"At one point," said Jensen, "we were the doomsday warehouse for watermelons. Melons began to breakdown in just two days. We contacted Ethylene Control in California and started learning all we could about ethylene. University of California studies indicate that 25 parts per billion would adversely affect melons and our air tests show extremely high levels of ethylene even though we thought we were venting the room well. It was a very expensive lesson for us to learn."

Delta Produce now runs seven EC-3 machines from Ethylene Control and Jensen said they are finding more
and more ways to utilize them with different commodities.

"Regular attention to the ethylene is important. We change the power pellets in our machines every four weeks on a regular basis. A couple hundred dollars for pellets is much cheaper than losing fresh produce valued at thousands of dollars," Jensen explained. "We might have the melons for a day or up to a week before they go out to retailers and we want to cut as fresh as the day they came to us. With our ethylene management program we can guarantee freshness."

**Study: Kiwi Sensitive To Ethylene**

University of California studies by Dr. F.G. Mitchell show that kiwifruit is "extremely responsive to low concentrations of ethylene" and many "kiwi deterioration problems are related to ethylene sensitivity." Ethylene exposure before cooling can accelerate fruit softening during subsequent storage. Scientists report that storage temperatures above 0 degrees C and elevated ethylene are equally harmful in accelerating flesh softening.

Elevated carbon dioxide inside sealed polyethylene liners will slow softening, but potassium permanganate is a required element to reduce ethylene accumulation. In most cases, when no high ethylene-producing commodities are being held in adjacent rooms in the same facility, ethylene readings in storage rooms with the EC+3 filtration system are kept below 10 ppb and in numerous cases, below 5 ppb.

The same Power Pellets used in the EC+3 system, are sealed in teabag-sized "FreshPaks" that stay with the carton of fruit until it reaches retail outlets. That "FreshPak" produces high levels of nascent oxygen and helps eliminate excess ethylene to keep produce and fruit from ripening prematurely.

"This is the most cost effective way to keep fruits and vegetables fresh. I can buy with the assurance that my fresh produce is not going to decay in a few days."  
**Jimmy's American Café®, Des Moines, Iowa, Steve Winders, operations**

"We use ethylene to pre-condition our avocados. But, when left unchecked in the air, the gas creates problems for other produce items. This is another tool we use to promote strict quality control of our in-plant operations."  
**Index Fresh of California, Bloomington, CA, Mike Browne, president**

"I have witnessed a major increase in the life of my carnations, roses and other cut flowers. Ethylene Control is unbelievable. I've had flowers last as long as three and four weeks in my cold box."

**Korner Floral & Gifts, Fresno, CA, Leslie Corsero, owner**