The Sacramento County Environmental Management Department (EMD) respectfully submits this application for the 2008 Samuel J. Crumbine Consumer Protection Award. Over the course of six years (2002 through 2008), EMD has implemented several multifaceted enhancements to its Retail Food Program. These program improvements were intended to both greatly increase food safety practices at retail food facilities throughout Sacramento County and simultaneously reduce the occurrence of major violations identified as risk factors for foodborne illness by the Centers for Disease Control and Prevention (CDC). To accomplish this goal, EMD collaborated with many stakeholders from the retail food industry, local governing bodies, and the public to put the following three objectives into place: 1) increased inspection frequency based on risk, 2) accurate and timely disclosure of inspection results to the public, and 3) increased retail food operator understanding of the CDC risk factors and their prevention.

The Retail Food Program Enhancements were developed and implemented in two phases. As the second phase of the food enhancements comes to completion, notable improvement of food safety practices in retail food facilities is evident and reflected by the reduced occurrence of major risk factor violations documented during inspections.

As a result of its continued efforts, EMD and its staff have been recognized by the California State Association of Counties (CSAC) and the California Conference of Directors of Environmental Health for implementing innovative programs aimed at improving food safety and reducing risk factors that are known to lead to foodborne illness.
DEMOGRAPHY

California’s capital is the city of Sacramento which is Sacramento County’s largest city. Sacramento County is home to over 1.4 million people with more than 6 million visitors each year. The County includes seven incorporated cities, a large unincorporated area, and approximately 7,000 retail food businesses. Sacramento hosts many fairs and jubilees due to its outstanding weather, central location, and easy access to four major freeways.

Located in the middle of the 400 mile long Central Valley, Sacramento County is a prime agricultural region and commerce center covering over 994 square miles and extending from the low delta lands north to the State Capitol and east to the foothills of the Sierra Nevada Mountains.

Data from 2006 shows a 12.4% growth in population over the previous six years, almost double the average growth of California overall. Sacramento County’s population is diverse, with large communities of Hispanic (19.3%), Asian (13.5%), and African-American (10.5%) populations. In 2006, the median household income was $53,930. Eighty-five percent of Sacramento County residents over 25 years old have graduated from high school, and 28% have a bachelor's degree or higher. The top three areas of employment are: 1) government (26.3%), 2) trade, transportation and utilities (15.9%), and 3) professional and business services (12.4%).

By 2030, the Sacramento Area Council of Governments predicts the population to be approximately 1.9 million people. With the new Retail Food Program Enhancements that have been instituted, Sacramento County EMD is well prepared to meet the demands for protecting consumer health that high levels of growth will present.

RESOURCES

Sacramento County operates under a charter structure and has a five member board of supervisors. The County has over 14,500 employees reporting to a County Executive Officer, three primary service agencies (Countywide Services, Municipal Services, and Internal Services), law enforcement and counsel.
EMD operates under the Countywide Services Agency and has three technical divisions, including Environmental Health, Hazardous Materials, and Water Protection. EMD also seeks advisement on program initiatives from the Sacramento Environmental Commission (SEC), a joint powers commission consisting of nine members appointed by incorporated cities and the Sacramento County Board of Supervisors.

EMD’s Environmental Health Division (EHD) is charged with overseeing several consumer protection programs for Sacramento County including: retail food protection, recreational health, plan review, tobacco licensing, childhood lead poisoning prevention, employee housing, detention facilities, and noise abatement. This application focuses specifically on the Retail Food Program. EHD monitors close to 7,000 retail food facilities countywide including: restaurants, markets, schools, bakeries, bars, licensed health care facilities, certified farmers’ markets, community events, and mobile food vendors. This figure is inclusive of 5,300 fixed food facilities. In addition to conducting routine inspections to ensure compliance with state and local health and safety codes, EHD staff also investigate consumer complaints of foodborne illness and other complaints related to food safety and sanitation at retail food facilities.

EHD receives no general fund monies and is fully funded through permit, reinspection, and consultation fees paid by nearly 7,000 permitted retail food businesses. The total budget for the Retail Food Program including the plan review program is $4,105,894. In May 2007, EMD submitted a comprehensive five-year fee ordinance package to the County’s Board of Supervisors to ensure full cost recovery for all program services. The fee ordinance package was approved and is effective until 2012.

<table>
<thead>
<tr>
<th>Facility Type</th>
<th># in Sacramento County</th>
<th>Annual Permit Fee</th>
<th>Reinspection Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant w/ bar</td>
<td>433</td>
<td>$1236.00</td>
<td>$178.00</td>
</tr>
<tr>
<td>Restaurant</td>
<td>2325</td>
<td>$850.00</td>
<td>$178.00</td>
</tr>
<tr>
<td>Food prep w/o hood</td>
<td>987</td>
<td>$751.00</td>
<td>$178.00</td>
</tr>
<tr>
<td>Market &lt; 6000 ft²</td>
<td>971</td>
<td>$415.00</td>
<td>$134.00</td>
</tr>
<tr>
<td>Market 6001-14,999 ft²</td>
<td>39</td>
<td>$611.00</td>
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</tr>
<tr>
<td>Market &gt; 15,000 ft²</td>
<td>125</td>
<td>$808.00</td>
<td>$178.00</td>
</tr>
</tbody>
</table>

Table A. This table notes the primary food facility categories with accompanying permit fees. A full table is located in the appendix.
EHD currently has 57.8 positions including: 38.8 Environmental Specialists (ES), two Environmental Compliance Technicians (ECT), four Administrative Support Specialists, six Student Interns, five Program Supervisors, one Program Manager, and one Division Chief/Director. All ES’s are required to pass the California Registered Environmental Health Specialist (REHS) exam or be a certified trainee eligible for the exam within one year of their hire date.

**BASELINE AND PROGRAM ASSESSMENT**

*Program Planning*

**Vision, Goals and Objectives:** EMD’s vision is to promote a healthy and safe environment for all those who live, work, and visit in Sacramento County. EHD’s goal is to improve food safety and reduce foodborne illness, which is an integral part of the overall EMD vision.

A comprehensive review of the Retail Food Program was initiated in early 2002. In August 2002, the *Sacramento Bee* published a newspaper article entitled, “Restaurant Inspections Few and Far Between.” This media coverage served as a catalyst for timely improvements to the Retail Food Program. After completing a thorough program review, EHD sought to: 1) reduce the incidence of foodborne illness by reducing the occurrence of major risk factor violations through increased inspection frequency, 2) provide the public with accurate and timely disclosure of inspection results, and 3) provide operators with more information and educational opportunities. With the support of the retail food industry and governing bodies, EHD implemented several Retail Food Program Enhancements using a phased approach. The first phase (Phase I) of enhancements was introduced in 2003, and a second phase (Phase II) was introduced in 2005. Components of the phased enhancements are noted on the following page (Table B). These specific components are vital to EHD as it works toward fulfilling the vision of a safer environment in Sacramento County.
Table B: Components of Phase I and Phase II Program Enhancements with chronology.

<table>
<thead>
<tr>
<th>Program Enhancement</th>
<th>2002 (Pre-enhancements)</th>
<th>2003-2006 (Phase I)</th>
<th>2006-2008 (Phase II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Inspection Frequency</td>
<td>All Retail Food Facilities = 1x/year</td>
<td>Food Preparation Facilities = 2x/year Retail Markets = 1x/year</td>
<td>Food Preparation Facilities = 3x/year Retail Markets = 2x/year</td>
</tr>
<tr>
<td>Disclosure</td>
<td>California Senate Bill 180 – inspection report required to be available on site</td>
<td>• Local ordinance requiring inspection reports to be posted at facility • Reports posted online</td>
<td>• Color-Coded Placards posted at retail food facilities • Placard results posted online</td>
</tr>
<tr>
<td>Food Safety Training</td>
<td>Handouts provided to operators</td>
<td>• Compliance Assistance Bulletins • “Food Safety Education”</td>
<td>• How to Get a Green Placard training classes (Online, on site, and DVD)</td>
</tr>
<tr>
<td>Staffing</td>
<td>Total: 21 (ES, ES Supervisors, Interns, Admin. support, Manager)</td>
<td>Total: 34 (ES, ES Supervisors, ECT, Interns, Admin. support, Managers)</td>
<td>Total: 57.8 (ES, ES Supervisors, ECTs, Interns, Admin. support, Managers)</td>
</tr>
<tr>
<td>Standardization</td>
<td>Staff standardized through California Dept. of Health Services Standardization Program</td>
<td>Additional standardization provided by contractor</td>
<td>• Standardization training continued • Retail Food Field Inspection Guide</td>
</tr>
<tr>
<td>Enforcement</td>
<td>Reinspection fees</td>
<td>• Reinspection fees • Compliance Conferences</td>
<td>• Reinspection fees • Compliance Conferences • Color-Coded Placards • Additional Policies • Administrative Hearings</td>
</tr>
<tr>
<td>Incentives</td>
<td>None</td>
<td>Food Safety Awards of Excellence</td>
<td>• Green “PASS” Placard • Food Safety Awards of Excellence</td>
</tr>
</tbody>
</table>

Risk Orientation: On July 1, 2007, California adopted the California Retail Food Code (CalCode) which is based on the Federal Model Food Code. This science-based health and safety code focuses on five CDC risk factors that are associated with foodborne illness: 1) improper holding temperatures, 2) inadequate cooking, 3) contamination, 4) poor personal hygiene, and 5) food from unsafe sources. Prior to the implementation of CalCode, EHD engaged in an extensive program review and modification.
process in order to emphasize the CDC risk factors during the inspection process. The following are specific program areas where risk factors have been brought to the forefront:

- Inspection report redesign that clearly delineates major risk factor violations
- New Color-Coded Placard System for easy public use based on CDC major risk factor violations
- Risk-based and increased inspection frequencies
- Risk-based inspection training for EHD staff
- Risk-focused outreach including, How to Get a Green Placard training classes, mandatory “Food Safety Education” courses, Compliance Assistance Bulletins, and video instruction through website and DVD.

Risk orientation and its successful integration into a retail food program is crucial for the effective control and prevention of major risk factor violations and foodborne illness.

**Staff Participation:** Staff participation in program development activities is beneficial to the individual as well as the department. Staff gain experience that enhances their professional development and helps prepare them to pursue leadership roles. The department gains experienced and enthusiastic participants in creating program improvements. EHD staff has been instrumental in creating and completing many of the projects associated with the Retail Food Program Enhancements. Staff-driven teams were assembled to develop, draft, and implement concepts for many of the projects. Several EHD staff also participate in policy forming groups and professional associations at the state and national level. Examples include:

*CalCode Implementation Teams* – In January 2007, several teams were formed to carry out the tasks involved in the implementation of CalCode, which became effective on July 1, 2007. Staff teams addressed the following: forms modification, operator outreach, inspection report update, field inspection guide updates, and staff training. Not only did the teamwork create a path for successful introduction of CalCode, it also gave team members time to study and understand CalCode prior to its implementation.

*Food Team* – Both management and staff participate on this team which meets monthly to discuss food safety and enforcement issues reported by staff. The issues and directives are then discussed at monthly
staff meetings. This helps to ensure that adequate research and discussion can occur prior to the development and implementation of solutions.

**REHS Core Training Team** – This team of staff members is responsible for keeping the REHS Training Program running smoothly and for providing all the tools necessary for trainees to continue the program’s successful 95% REHS passing rate.

**Food Safety Class Instructors** – ES’s teach the food safety classes that EHD offers. After studying the materials and observing several classes, an ES can begin teaching the classes. This provides staff with a great opportunity to improve public speaking skills while also learning how to present food safety principles with a risk-based approach.

**State and National Associations and Advisory Boards** – Staff participate as elected board members and/or committee members in a variety of organizations, including: the California Conference of Directors of Environmental Health Food Policy Committee, the California Environmental Health Specialist Registration Committee, the California Retail Food Safety Coalition, the Bay Area Food Technical Advisory Committee, the California Environmental Health Association, and the National Environmental Health Association.

**Pilot Program for Computerized Inspections/Tables** – Several ES’s were selected to conduct inspections using laptop computers and new software. The testing and feedback provided valuable information which will assist with a smooth transition to computerized inspections.

**Recruitment and Retention Task Force** – This team is responsible for assessing the recruitment methods that are available to this department and making recommendations to management. Once recommendations are approved, this team is also responsible for implementation. The team has completed recruitment flyers, designed and upgraded booth displays, improved website information, staffed career fair booths, conducted classroom presentations, and posted positions on career websites such as Monster.com. Some of the materials, such as the recruitment flyer, have even been adopted for use by other groups such as the California Conference of Directors of Environmental Health.
Website Development Team – This team is comprised of staff members with previous experience in website design. The team works with members of the EMD Information Technology (IT) group to redesign portions of the website, making it more user friendly for EHD customers. The EMD website is scheduled to release a new and improved format in the spring of 2008.

Self-Evaluation: EHD has continually adjusted to code changes and trends in the retail food industry through self-evaluation and feedback from stakeholders. Phase I of the Retail Food Program Enhancements included increased inspection frequency, food safety education and mandatory posting of inspection reports. In 2004, one year after Phase I enhancements were introduced, EHD reviewed inspection data and found that 40% of restaurants and 25% of retail markets had major risk factor violations documented during the most recent inspection. This self-evaluation prompted Phase II of the Retail Food Program Enhancements including a new disclosure system, additional education, and incentives for compliance.

Other methods of self-evaluation that EHD has used include database review, input from focus groups, and open forums for comments during public workshops. Self-evaluation is also conducted through field standardization of ES’s and ongoing review and improvement of inspection tools (i.e. field inspection guide, inspection report forms, policies, and educational materials). Monthly meetings are held with a stakeholder group, the Retail Food Industry Work Group, to obtain input and comments regarding various aspects of EHD’s Retail Food Program. Feedback is provided by management and staff for all aspects of the Retail Food Program and improvements are made as needed.

Program Management

Active Managerial Control: EHD has better defined its role as a leader and partner with the regulated community by relaying information regarding risk control factors encountered at retail food facilities. An ES reviews risk factors and assists food facility operators with finding solutions that will be incorporated into their standard operating procedures during each inspection. EHD has also developed several tools that food managers are encouraged to use, such as: stickers that can be used in the kitchen to remind food
handlers of required food temperatures and proper sanitization procedures, self-inspection checklists,
temperature logs, the Retail Food Code Field Inspection Guide, as well as a variety of handouts and Compliance Assistance Bulletins. EHD has also developed a *How to Get a Green Placard* poster to remind food handlers of basic risk factors. The posters are printed on tear-proof/water-proof card stock with colorful pictures and are provided in English, Spanish, Cantonese, and Korean.

Another innovative practice that EHD has undertaken is mandatory “Food Safety Education” (FSE). Food facility operators are responsible for ensuring that food handlers are properly trained and that corrective actions are longstanding. If major risk factor violations are repeated on consecutive inspections, operators and staff are required to attend FSE. FSE is often used as an enforcement tool, but it is also a powerful method of encouraging active managerial control by the facility. Since management and food handlers often attend the class together, it creates a unique opportunity to address specific problem areas and form permanent solutions.

**Epidemiological Capabilities:** A formal Foodborne Illness Policy and Procedure was developed and implemented in 2003. This policy outlines the steps that are to be followed while conducting foodborne illness investigations. EHD administrative staff is trained to complete foodborne illness intake reports from consumers reporting symptoms. A detailed list of people who ate the meal, symptoms experienced, all foods consumed by each person, as well as a 72-hour food history are recorded. The intake reports are immediately reviewed by a program supervisor for triage and assignment. EHD also works closely with the County’s Health and Human Services Department to investigate those foodborne illness cases that are either confirmed by a physician or subject to official reporting requirements by California law.

In 2004, Sacramento County EMD partnered with the County’s Public Health Laboratory and Disease Control and Epidemiology Division to develop a cross-agency protocol for the handling of foodborne illnesses. The protocol provides guidance for intake, preliminary investigation, interviews with related parties, assessment of practices of potentially ill employees, and communication with the public.
The protocol ensures that all departments involved in identifying and resolving a foodborne illness are operating in an efficient and predictable manner with little or no redundancy.

**Data Management and Utilization:** During the last six years, EHD has made full use of its data management and utilization capabilities. Every employee has a computer and uses *Envision* software to track inventory and log inspections. All inspection documents are scanned to *FileNet*, an imaging program, which makes it possible to view any of two million documents at a desktop computer within seconds. EHD no longer has a paper file system; all records are stored electronically. Using both the *Envision* software and *FileNet* has resulted in a comprehensive reporting system with a wide span of capabilities including the ability to view imaged reports on EHD’s website, and to issue invoices for permits and reinspections. *Envision* data can also be used to track violations, consumer complaints, foodborne illness complaints, facility closures, and permit suspensions. *Envision* data has also been used to evaluate time spent on each type of service which provides a basis to establish fees. *Envision* also assists in creating special data reports and managing employee timesheets.

The EMD website began posting inspection results on July 1, 2003. Inspection reports for the most recent two routine inspections and reinspections may be viewed on the website, as well as a summary of results. Placards issued following inspections are posted on the EMD website within 24 hours in the interest of providing timely, accurate, and fair information. Since July 1, 2003, the website has received over 3.7 million views of the food facility inspection search page.

This year, EHD will be transitioning to an upgraded software program called *Envision Connect*, which will assist with the implementation of a computer-based inspection format. It is anticipated that inspection reports will be completed in the field using laptop computers by the end of 2008. This will result in a reduction of data entry, more rapid and accurate reporting, and inspection reports that are consistently legible.

**Analysis of Outcomes:** Many of the programs that EHD has developed were launched within the last six years, and each program is evaluated continually through input from staff, industry, and the public.
Throughout the years, adjustments have been made as a response to the outcome of each new program. For example, in 2004, food facilities were required to post their inspection reports where they could be viewed. After all facilities had been notified and had received their first inspection under the new system, a survey was conducted to determine overall compliance with this requirement. Only 50% of facilities had their inspection reports properly displayed. Additionally, public response indicated that inspection reports were difficult to locate, understand, and read. As a result, new methods of disclosure were researched, and in 2007, a new Color-Coded Placard System was implemented for the disclosure of inspection results.

*Envision* software is also used as a management tool to produce a monthly report that summarizes and tracks inspections and other workload activities. The tracking capabilities of the EHD database are useful in analyzing outcomes such as: inspection completion rates, types of violations documented, placard issuance, numbers of consumer complaints, number of foodborne illness complaints, and plan review completion rates. EHD can then use this information to pinpoint geographical areas that may need additional outreach or identify the most common types of violations and adjust the inspection and education process accordingly.

**Support and Resources:** EHD strives to ensure that support and resources are available to maintain and improve the quality of the Retail Food Program. The most valuable resource in any inspection program is well-trained, consistent, and reliable staff. Appropriate support and resources were added to ensure success during each phase of the Retail Food Program Enhancements. Inspection staff has more than doubled in the last six years, from 15 ES positions in 2002 to 38.8 ES positions in 2008. EHD also added two ECT positions during this period. Many ES positions have been filled at the trainee level, and in response, EHD has invested considerable resources creating a successful REHS Training Program. The EMD organization, including the Hazardous Materials Division and the Water Protection Division have worked together to provide trainees with required training hours in several environmental health disciplines.
The Sacramento Environmental Commission (SEC) has also served as a valuable resource for EHD by providing feedback and support for proposed improvements. Members of the SEC come from diverse backgrounds, frequently representing environmental law, community advocacy, environmental regulation, industry, and land use. The SEC is charged with providing information, analysis, and advice to elected officials and EMD on environmental issues and programs.

In addition, EHD has formed a partnership with the Sacramento County Business Environmental Resource Center (BERC), a one-stop non-regulatory permit assistance center established to help businesses understand and comply with federal, state, and local environmental regulations. BERC is another outlet used to provide the public with accurate, useful information about the laws and requirements for retail food facilities. EHD has also fostered strong relationships with other county and city departments and agencies, such as the local building departments, local law enforcement, local fire districts, local code enforcement, University of California Cooperative Extension, Sacramento County Agricultural Commissioner, California Department of Public Health, and US Food and Drug Administration.

**External Involvement**

**Industry and Consumer Interaction:** EHD views industry and consumers as customers, and customer service is a fundamental component of EHD’s overall mission. EHD excels in customer service on a daily basis by providing customers with food safety knowledge and education. ES’s are available Monday through Friday to conduct mobile food facility inspections and provide technical assistance for walk-in and telephone customers during designated office hours. In addition, two ECTs and a Program Supervisor are available to provide customer service and technical assistance throughout the day. The additional customer service provided by the ECTs also allows the ES’s to focus on inspection needs in the field. EHD takes pride in having an informed and efficient staff readily available to its customers.

Another way that EHD has positive interaction with industry and consumers is through the Food Safety Awards of Excellence Program. Established in 2004, the annual award provides an incentive to
reduce the number of major risk factor violations and recognizes the operators of food facilities who have exhibited exemplary food safety practices. Recipients must have at least two consecutive routine inspection reports with no major risk factor violations and a current food safety certificate on file. Approximately 10% of food facilities have received awards each year since 2004. Recipients are recognized through an award ceremony before the Board of Supervisors and are highlighted on the EMD website.

In an effort to improve communication and collaboration among stakeholders, EHD convened a Retail Food Industry Work Group comprised of representatives from EHD, the retail food industry, the California Restaurant Association, the California Independent Grocers’ Association, SEC, and BERC. This group meets monthly to discuss food safety policies, legislation, programs, trends and emerging topics that impact both the public and private sectors. The Retail Food Industry Work Group meets monthly and was instrumental in providing feedback as various components of the food safety programs were being developed. The dialogue with this group of stakeholders was very useful in finalizing many of the details associated with the Color-Coded Placard System such as: criteria, field trials, field inspection guide, placard design and posting requirements, outreach and education, and annual permit fees.

It is through these avenues that EHD has worked to fully understand its customers and ensure that their needs and demands are addressed effectively and efficiently.

**Community Educational Outreach:** Education is an essential element of EHD’s community outreach efforts and various educational tools have been designed to meet the needs of various target audiences. Through educational opportunities, EHD is able to supply food facility operators, food handlers, and the public with food safety information and tools to reduce the occurrence of major risk factor violations that are associated with foodborne illness. EHD provides outreach through food safety handouts, Compliance Assistance Bulletins, booths at career/community events, as well as through the following methods:
Website: The EHD website contains information on food safety, training schedules, and the Color-Coded Placard System. A new instructional video entitled, *How to Get a Green Placard* was added in January 2008 to assist operators in reducing major risk factor violations. Routine inspections, any associated follow-up inspection reports, and placard results are posted on the EMD website. If a placard color is changed following a reinspection, the result is posted the same day. A list of facility closures (red placards) is also maintained on the EHD website.

Media: EHD works closely with the media to communicate with the public. EHD staff provided several interviews during the implementation of the Retail Food Program Enhancements, especially regarding the most prominent component – the Color-Coded Placard System. These stories have been presented in English and Spanish through various outlets, including: television, radio, newspaper, and magazines. EHD has also collaborated with the media to provide food safety information related to current issues, such as seasonal food safety tips and power outage information.

Presentations: EHD staff are often invited to present information regarding the environmental health profession at Northern California universities and colleges including: University of California Davis, California State University, Sacramento, and California State University, Chico. EHD offers ride-along opportunities for students and others with a specific interest in learning more about the Retail Food Program and the environmental health profession.

Manager/Food Worker Training Partnerships: As mentioned previously, one of EHD’s primary goals is to reduce the incidence of foodborne illness by reducing the occurrence of major risk factor violations. To help reach this goal, EHD developed the Food Safety Education (FSE) class and the *How to Get a Green Placard* training class. FSE covers the basic principles of food safety including: time/temperature control, personal hygiene, cross contamination, approved sources, and facility sanitation. The *How to Get a Green Placard* training class is a 90-minute class designed to assist food facility owners, managers, and other interested parties in knowing how to reduce major risk factor violations so they can achieve a green
“PASS” placard. As noted in the “Community Educational Outreach” section above, this class has been made into a 25-minute video presentation that is available on DVD and on the EMD website for operators and their staff to view at their convenience. The DVD presentation has been mailed to all food facility operators in Sacramento County.

**Program Implementation**

**Disclosure of Inspection Results/Enforcement:** On January 2, 2007, EHD became the first jurisdiction in the nation to implement a color-coded placard food inspection disclosure system. EHD modeled the disclosure system after a similar program used in Toronto, Canada. The placard system uses three different colors: green, yellow, and red. All fixed retail food facilities receive a color-coded placard at each inspection. The placard is issued according to the number of documented major risk factor violations which are based on the five CDC risk factors and are in line with CalCode. Major risk factor violations must be corrected or mitigated by the end of the inspection. While minor violations are documented and allowed more time for correction, they are not factored into the placard results. A green “PASS” placard is issued to retail food facilities that have no more than one major risk factor violation that is corrected during the routine inspection. A yellow “CONDITIONAL PASS” placard is issued to retail food facilities when two or more major violations are identified. In addition to having to correct/mitigate all major risk factor violations during an inspection, facilities issued a yellow placard are reinspected within 24-72 hours to ensure ongoing compliance. If all major risk factor violations remain corrected at the reinspection, the facility will be issued a green “PASS” placard. EHD also conducts weekend inspections, which allows most facilities to receive a reinspection within a 48-hour time frame. Red “CLOSED” placards (temporary permit suspension) are issued to facilities with major risk factor violations that cannot be corrected or mitigated during the time of inspection and pose an imminent threat to public health. Violations such as overflowing sewage, lack of water, and vermin infestation are grounds for a red
placard posting. A facility that has been issued a red placard must remain closed until major violations are corrected and the facility is cleared for opening by EHD.

Placards must be posted within five feet of the front door per Sacramento County ordinance. Removing or defacing the placard is an infraction for which owners may be issued a citation. Yellow and red placards contain a section of check boxes for each of the five CDC risk factor violation categories. The box that corresponds with the major risk factor violation(s) observed is marked by the ES. Additionally, placards display a “previous inspection” section that discloses the placard color issued at the previous inspection. This gives the public a glance at the facility’s inspection history. The previous inspection section also serves as a useful tool for sending facility operators the message that continued compliance is essential.

The first time a facility receives a yellow placard, the ES recommends that the operator and staff attend a *How to Get a Green Placard* training class. After a second yellow placard is issued, a facility’s entire food handling staff is required to attend FSE. When a third yellow placard is issued, the facility’s owner/operator is ordered to attend a compliance conference at EHD offices. The goal of the conference is to discuss repeated major risk factor violations, reach a compliance agreement, and inform the operator about the EHD enforcement process. If a fourth yellow placard is issued to the facility following a compliance conference, an administrative hearing is scheduled for possible permit suspension or revocation. A similar process is applied to facilities that do not receive consecutive yellows, but engage in a repeated yellow/green/yellow pattern of inspection results. In addition to the enforcement proceedings mentioned above, facilities are charged for reinspections not included in the permit fees.

**Formal Staff Training Program:** EHD has a formal REHS Training Program as well as continuous training for registered staff. The REHS Training Program is based on the criteria outlined by the State of California, and both REHS and continuous training is based on FDA National Retail Program Standards.

The REHS Training Program plan was revised, and a full training program was established in 2004. New REHS trainees are immersed in a six-week program that includes classroom review of
internal policies and procedures, as well as classroom and field training in all aspects of the inspection process. Field and classroom training are provided by senior and supervisory ES’s. All trainees must pass both a supervisor field review and a food safety certification course prior to being cleared for independent field inspections. In addition, EHD provides paid registration and travel to an REHS training course, Basic Inspector Academy, and pertinent California Environmental Health Association educational symposiums and updates. The training coordinator works closely with EMD’s other divisions in order to ensure all REHS trainees receive training hours in all environmental health areas as required for admission into the REHS examination.

Sacramento County and EHD supports professional development through a tuition reimbursement program and internal training opportunities such as: supervision courses for supervisors and lead personnel, Leadership Academy for managers and supervisors, customer service classes, communication classes, and computer training. Every year, EHD staff work together with their supervisor to design an annual training and development plan that identifies and provides for individual training needs and professional growth.

EHD also provides ongoing training for staff on current topics in environmental health. For example, prior to the implementation of the CalCode in July 2007, EHD held numerous training sessions to provide all ES’s with the same information that was presented by the California Retail Food Safety Coalition in a “Train-the-Trainer” CalCode course. EHD also contracted with a private REHS consultant with extensive experience to provide standardization training to the EHD staff and assist with other training activities. More recently, EHD has held in-house training sessions on special topics such as: pasteurized eggs, ethnic foods, and commercial dishwashing machines. The retail food industry is dynamic, and EHD is committed to providing training that will keep staff prepared and informed.

**Internal Quality Assurance:** Fairness and accountability in all actions is crucial to maintaining credibility within the community that EHD serves. Operators want assurance that there is equality in the inspection and enforcement process. EHD uses several methods to accomplish quality assurance.
EHD has worked with representatives from the FDA to implement several of the Recommended National Retail Food Regulatory Program Standards. Through this process EHD has been able to conduct self-assessment using the standards which has led to several program improvements. For Standard No. 2, Trained Regulatory Staff, EHD examined the training of inspection staff and worked to improve some of the existing practices. For example, a trainee must now conduct a field inspection while being observed by a supervisor and meet specific criteria prior to being released to conduct independent inspections. Guided by the FDA’s Program Standards criteria, EHD conducted baseline inspections in 2003 and 2006 which are set for a five-year comparison review.

To ensure standardization, supervising ES’s schedule ride-alongs with staff to review inspection practices. In addition, EHD has been divided into five geographical regions that are represented by teams that meet every six weeks to discuss standardization issues and consistency. Time is dedicated to discussion of inspection issues and questions during monthly EHD staff meetings. EHD also sustains a “Food Team,” an internal technical advisory working group which is charged with procedure and policy decisions as well as continued program quality assurance and control.

Self-evaluation is conducted through periodic reviews of inspection data by supervising ES’s. Data reviewed includes: types of violations documented and writing format, and number and type of placards issued by each ES. By conducting this periodic review, supervisors can observe and resolve discrepancies in staff activity.

EHD works hard to maintain an open dialogue with the retail food industry and has encouraged feedback from operators regarding its Retail Food Inspection Program. The Retail Food Industry Work Group also provides input to promote consistency in inspections. This provides EHD with an excellent opportunity to conduct self-evaluation and make productive changes.

**ISSUES AND CHALLENGES**

While aiming for program improvements, EHD identified three significant issues and challenges, which would contribute to the reduction of major risk factor violations during inspections. Challenge #1,
Increased Inspection Frequency Based on Risk, is an element that remains paramount to EMD’s mission statement and is considered a priority. Challenge #2, Disclosure, is critically important for both providing an incentive for compliance and communicating clear and simple food safety messages to the public.

Challenge #3, Outreach and Education, is key to providing food facility operators with the tools needed to avoid the occurrence of major risk factor violations that may lead to foodborne illness.

**Challenge 1: Increasing Inspection Frequency Based On Risk**

**Challenge:** Implementing an increased and risk-based inspection frequency for retail food facilities.

**Objective:** Conduct three routine inspections per year at all high risk food preparation food facilities and two routine inspections per year at all low risk food facilities.

**Methods:** A critical element in the effective promotion and enforcement of food safety in retail food facilities is frequent inspection and education. With this in mind, Sacramento County instituted an increased and risk-based inspection frequency for its 5,300 fixed retail food facilities.

In 2002, Sacramento County employed 15 ES’s to conduct inspections at retail food facilities. During this period, all retail food facility categories were assigned one routine inspection per year. To accomplish the proposed three inspections for high risk food facilities and two inspections for low risk food facilities per year, an increase in inspection staff was necessary. There were three primary considerations: 1) the quantity and type of new positions needed and the subsequent increase in fees necessary to fund new positions, 2) the development of a formal REHS Training Program, and 3) the recruitment of qualified candidates for new ES positions, despite the current nationwide REHS shortage.

In order to project the quantity of additional staff needed to meet inspection goals and the cost of those additional staff, EMD retained the services of a government finance and management consultant to conduct a fee study. The consultant performed a thorough analysis of the retail food inspection program and worked closely with EHD’s budget officer to conduct time studies for inspection services offered to food facilities. To support the additional staff that would be needed, a 10-20 % annual increase in fees
would be necessary. EHD recognized that it would be helpful to open an early dialogue with stakeholders about the proposed increase in inspection frequency prior to presenting the proposal to the Sacramento County Board of Supervisors. Prior to each request for increased staffing, proposed program and fee modifications were discussed at several public hearings as well as during monthly meetings held with the Retail Food Industry Work Group. Proposals were overwhelmingly supported as all parties involved welcomed an increase in service and education to improve food safety and consumer confidence.

Following Phase II of the Retail Food Program Enhancements, EHD was faced with filling newly created positions and several existing vacant positions. EHD was challenged with obtaining interested and qualified candidates. Due to a limited pool of REHS candidates, EHD elected to open the available positions to eligible trainee candidates. To ensure that trainees would progress to a full journey level position, a comprehensive State-approved REHS Training Program was developed, and a training coordinator position was established. With a training program in place, it was easier to fill positions; however, it was imperative that individuals hired were well suited and informed about careers in Environmental Health.

A variety of recruitment efforts were used to fill the newly created ES positions. External outreach became a priority. ES vacancies were posted on the California Environmental Health Association, California Conference of Directors of Environmental Health, and Monster.com websites. Job announcements were mailed to over 1,200 certified REHS trainee candidates in California. EHD also engaged in outreach by participating in over 50 career fairs and by maintaining an active relationship with local university career centers. EHD staff has provided classroom presentations about careers in Environmental Health and ride-alongs for individuals interested in pursuing a career in Environmental Health. In addition, EHD expanded its student intern program and currently employs six student interns. The interns obtain experience and exposure to environmental health, and EHD benefits in several ways, including the ability to develop potential candidates. EHD currently employs seven former interns as
ES’s. Overall, the aggressive recruitment effort has had very positive results. The last applicant list for ES trainee positions noted over 40 qualified applicants, a remarkable improvement from previous years.

**Measurable Outcomes and Achievements:** The REHS training program and recruitment efforts have been effective for increasing staffing. To date, EHD has had 12 employees successfully complete the REHS Training Program and currently employs 12 trainees in different stages of the program. EHD now easily fills vacancies. With increased staffing, the frequency of inspections has increased substantially (Figure 1a). Major risk factor violations decreased overall by 17% from 2005 to 2007 and by 30% from 2006 to 2007 (Figure 1b). The number of reported enteric diseases has generally declined since 2002 (Figure 1c).

*Figure 1a:* The sharp increase in Environmental Specialist staff from 2003 to 2007, led to an equally sharp increase in retail food facility inspections.

*Figure 1b:* Increased staffing, inspection frequency, and standardization initially resulted in increased documentation of major risk factor violations. Currently, however, the frequency of major violations is declining. This may be attributed to increased educational opportunities and additional incentives for operators.
Challenge 2: Disclosure

Challenge: Provide a method of inspection result disclosure that would have a positive effect on food safety practices.

Objective: The successful implementation of a disclosure system which:
- Provides an instant message to the public
- Increases compliance
- Decreases the incidence of foodborne illness, through the reduction of major risk factor violations.

Methods: EHD studied many different types of disclosure systems used throughout the country and internationally. Representatives from areas where disclosure systems were used consistently reported that it helped to increase the focus on food safety for both consumers and operators. EHD concluded that implementing the appropriate type of disclosure system would aid in reducing major risk factor violations. EHD took many steps that led to the selection of the Color-Coded Placard System that is in use today.

Figure 1c: The California Department of Public Health compiles data on reportable diseases submitted by each county. EHD tracks those reportable foodborne illnesses that require employee exclusion per CalCode. The data indicated an overall decline in illnesses since 2002.
Increased Disclosure of Inspection Results: In January 2002, the California Uniform Retail Food Facilities Law was revised to require that food facilities retain copies of inspection reports on site and make them available for review by members of the public. This did not satisfy the public demand for information. In general, consumers were uncomfortable requesting inspection reports or found that operators could not locate reports when requests were made.

During Phase I of the Retail Food Program Enhancements, a new Sacramento County Code was adopted requiring food facility operators to post the full inspection report near the entrance to the facility. A survey conducted one year later found only 50% compliance with this requirement. Furthermore, public comments indicated that the inspection reports were difficult to read and understand.

Phase II of the Retail Food Program Enhancements evaluated public disclosure of inspection results and set the following goals: 1) inform public with an instant message, 2) increase compliance, and 3) decrease incidents of foodborne illness, through the reduction of major risk factor violations.

After traveling to jurisdictions that used a variety of food safety rating systems such as letter grades, numerical ratings, and color-coded placards, EHD decided that the Color-Coded Placard System would be the best choice for Sacramento County. Color-coded placards are based solely on major risk factor violations. This system ensures that the major risk factor violations are abated and provides information to the public that is a timely and accurate reflection of a facility’s food safety practices. Color-coded placards also met the objectives of accurate, timely, and simple information as requested by the food industry and the public.

During the development process, EHD worked with the Retail Food Industry Work Group and utilized their assistance in fine-tuning the details of the placard system. Industry concerns were also carefully considered in determining the placard criteria. EMD, industry, PASS - A green “PASS” placard is issued when no more than one major violation is observed

CONDITIONAL PASS - A yellow “CONDITIONAL PASS” placard is issued when two or more major violations are observed.

CLOSED - A red “CLOSED” placard is issued when an imminent threat to health and safety is observed.
the SEC and the Board of Supervisors were in support of the system as it was presented; however, the system had not been tested for public opinion. At this point, the Aurora Research Group was hired. The Aurora Research Group conducted focus groups to gather insight and feedback from Sacramento area residents regarding various aspects of the proposed placard program. Their input was extremely valuable and resulted in several improvements in the placard design.

In the months preceding the full implementation of the Color-Coded Placard System, EHD conducted field trials during inspections. ES’s provided food facility operators with a “Field Trial” handout showing which placard would have been issued had the placard system been in effect on that date. The handout included a list of violations to avoid and summarized major risk factor violation categories. The field trial handout was well received, and many operators posted it on the wall with pride to display that they would have received a green “PASS” placard. The field trial period also provided one-on-one discussion opportunities with operators, allowing them to express concerns or questions regarding the new disclosure program.

**Introducing the new disclosure system:** EHD used several avenues to introduce the placard system to operators and the public. EHD worked with newspapers, television, radio, and local magazines to increase public awareness of food safety issues and assist in introducing the new disclosure system. The Sacramento Bee had headline and front-page coverage regarding the Color-Coded Placard System which was very helpful in informing the public about the criteria for the different color-coded placards. In addition, newspaper, television, radio, and websites throughout the Sacramento area created links to the EMD website where inspection results, including the actual report could be viewed.

To ensure that all operators and the public had plenty of access to information pertaining to the new Color-Coded Placard System, *How to Get a Green Placard* training classes were offered in English, Spanish, Cantonese, Punjabi, and Korean, beginning in mid 2006. These free classes were designed to help operators understand the major risk factor violations and how
to prevent them. Classes were offered regularly at EHD and throughout the community at local businesses, chambers of commerce, libraries, and association halls in the months prior to beginning the Color-Coded Placard System. The classes were also heavily advertised via EHD newsletters, industry newsletters, local chambers of commerce, websites, and through direct contact with food facility operators. Class attendees were provided with training DVD’s, Compliance Assistance Bulletins, posters, stickers, and handouts regarding safe food handling and specific criteria for the Color-Coded Placard System.

Prior to January 2007, every food facility was mailed a newsletter that included information regarding the color-coded placard criteria, how to reduce major risk factor violations, and a schedule of free training classes. Additionally, a Compliance Assistance Bulletin explaining the new Color-Coded Placard System was hand delivered to each food facility during inspections from July through December 2006.

It cannot be overlooked that posting a yellow placard may inhibit consumers from patronizing a food facility. Public pressure to achieve and maintain a green “PASS” placard has played an important role in reducing major risk factor violations at retail food facilities. The yellow “CONDITIONAL PASS” placard provides an incentive to food operators to quickly improve their food handling practices and avoid major risk factor violations.

**Measurable Outcomes and Achievements:**

As previously stated, compliance with public disclosure requiring posting inspection reports was at 50% in Sacramento in 2005. The new user-friendly placard system reduces major risk factor violations and has countywide acceptance. Compliance with the placarding system is very close to 100%, in part due to the improved system as well as an educated public looking for the placard prior to patronizing a food facility. Public support of the system is evidenced by responses.
to a survey posted on the EHD website where 84% of website users voted that they liked Sacramento County’s Color-Coded Placard System.

EHD’s educational efforts have also been highly successful. Over 480 *How to Get a Green Placard* training classes have been taught by EHD educating more than 2,440 people working in the food industry. These educational opportunities have allowed EHD to directly support the food industry in achieving compliance and positively benefitting food safety for consumers in the Sacramento area.

**Challenge 3: Outreach and Education**

**Challenge:** Improve the level of food safety knowledge and skills for food facility operators.

**Objective:** Provide effective outreach and education to retail food facility operators.

**Methods:** Increased knowledge by food handling employees at all levels is key to improving food safety practices. Increasing food safety will result in a reduction of major risk factor violations, thus minimizing the risk of foodborne illness. EHD has used multiple methods to increase educational outreach.

**Training:** Food Safety Education (FSE) is mandated by EHD when major risk factor violations are repeatedly noted during food facility inspections. All food handling employees are required to attend. This hands-on, interactive classroom training focuses on the basic principles of food safety, how and why foodborne illnesses occur, and the important role the food handler plays in foodborne illness prevention. By requiring attendance at this class, EMD is ensuring that food facility employees are receiving the vital information needed to prepare food in a safe manner.

EMD currently provides the 2 ½ hour FSE class several times each month at a nominal cost of $20 per person. Food facility owners also have the option of having FSE conducted at their facility for a minimum fee of $400. Classes are offered in English, Spanish, Cantonese, and Punjabi. When food handling employees speak languages not offered by EHD, the owner is encouraged to provide an interpreter. Participants are tested at the end of the class and receive a Certificate of Completion.
Prior to implementation of the FSE program in 2003, EHD mailed a Compliance Assistance Bulletin and FSE brochures to all retail food facilities throughout Sacramento County in order to explain FSE and respond to commonly asked questions. Due to the unique nature of this program, there has been both television and print media coverage with positive feedback from attendees, the regulated community, and the public. FSE is a useful tool because it provides food facility owners with an opportunity for their employees to receive low-cost education about food safety from a professional source. The FSE program is self-funded through payment by attendees. By focusing on education rather than simply penalizing the operator through reinspection fees, this program has been successful. Follow-up inspections at facilities where food handlers have attended FSE demonstrate better than average compliance rates, proving the program’s effectiveness. The FSE program was awarded the 2004 California State Association of Counties Challenge Award, based on demonstrated leadership, innovation, collaboration, creativity, resourcefulness, and effectiveness, as well as the potential for successful elements of the program to be used as a model for other counties.

As previously discussed, the How to Get a Green training class was introduced with the Color-Coded Placard System. This voluntary class has been made available on a DVD which has been mailed to all operators and can be viewed on the EHD website. In addition to classroom training, EHD staff provides hands-on training of food safety practices at food facilities by request.

EHD’s outreach activities are also enhanced by its richly diverse staff. By employing a culturally diverse staff, EHD is prepared to provide clear communication and customer service to the entire community.

**Website:** EHD’s website, [www.emd.saccounty.net](http://www.emd.saccounty.net), is an effective outreach tool containing a wide variety of food safety information and resources. Some examples of educational food safety materials posted on the website include information about food safety, cooking temperatures, cooling, thawing, and handwashing facts. In addition, the website supplies consumers with reader-friendly tips on using safe food handling practices in their home. Examples of such Consumer Food Safety Fact Sheets include:
“Food Safety While Camping,” “Holiday Safe Food Strategies,” “Keeping Food Apart to Avoid Cross-Contamination,” and “Summer Food Safety for Outdoor Grilling.” The Food Safety Fact Sheets for consumers were created in collaboration with the University of California Cooperative Extension. The website also contains links for frequently asked questions, job announcements, food facility annual fees, food facility inspection reports, training class schedules, training videos, the California Retail Food Code Field Inspection Guide, CalCode, and the Award of Excellence recipients list.

Field inspection educational outreach: While conducting inspections, EHD staff remains focused on educating operators on how to prevent major risk factor violations in food facilities. To assist staff and operators, EHD created the California Retail Food Code Field Inspection Guide. The field inspection guide was initially developed in 2006 to accompany the California Uniform Retail Food Facilities Law and was revised when this law was replaced with the CalCode in July 2007. This comprehensive document fully outlines each of the 49 violation categories on the food facility official inspection report. It begins with a simplified summation of the code that applies to a particular violation category followed by real-life examples of major and minor violations. This tool helps food facility operators understand CalCode and apply both the requirements and food safety principles to their operation. The field inspection guide is also used by ES’s during inspections, which improves standardization of EHD staff. To ensure that all operators had access to this information, the field inspection guide was mailed to over 5,300 fixed food facilities and also distributed by staff. The team responsible for creating and updating the field inspection guide was recognized at the 2007 Sacramento County Stars of Excellence employee recognition event.

EHD’s new risk-based inspection report has also proven to be an important inspection and educational tool. The new report includes a comprehensive checklist of inspection items that clearly identifies major risk factor violations. This new format gives the document a dual function: providing the
public with a user friendly document, that is designed to highlight practices that contribute to foodborne illness, while promoting standardization among EHD staff.

**Public food safety outreach:** National Food Safety Education Month occurs each September. EHD celebrates and conducts food safety outreach in partnership with the California Restaurant Association. Activities included: signing a National Food Safety Education Month Proclamation by the Sacramento County Board of Supervisors, presentation of “Awards of Excellence in Food Safety” to eligible facilities, educational outreach events at the Downtown Certified Farmers’ Market, providing educational outreach at Sacramento County grocery stores and staffing an outreach booth at Carmichael Park Founder’s Day to demonstrate proper cooking temperatures and safe food handling techniques. These activities provide unique opportunities in which to educate the public.

**Measurable Outcomes and Achievements:** Since 2003, over 300 FSE classes have been taught by EHD staff to 3,242 foodservice employees representing over 861 food facilities (Figure 3a). Facilities that have attended FSE have shown a remarkable reduction in major risk factor violations (Figure 3b). The average number of major violations reduced significantly from 3.6 to 1.8 since FSE was implemented.
PROGRAM SUSTAINABILITY

EHD has developed a reputable Retail Food Program and has earned respect among the community and the retail food industry in Sacramento County. EMD operates all of its mandated programs by a method of cost recovery. EMD has utilized the services of an independent consultant to review fee mechanisms and time studies for services provided by the department. The consultant made recommendations regarding methods used to determine fees to ensure appropriate cost recovery and sustainability. In 2007, the Board of Supervisors approved a five-year fee ordinance following several industry workshops and public hearings. The fee ordinance will be in effect until 2012 and will allow EMD and the regulated industry to plan their budgets for five years.

The population, number of retail food facilities, and needs of the business community within Sacramento County have steadily increased over the last several years. EHD’s Retail Food Program has grown and is now well recognized for the type and quality of services provided for the retail food industry and the public. Public awareness and demand for improved food safety will continue to drive community support for EHD’s Retail Food Program, due in large part to a highly visible disclosure system and national media attention on food safety issues.

SUMMARY

The program enhancements implemented during the last six years have had a momentous impact on food safety awareness among the retail food industry and the residents in Sacramento County. EMD’s website receives over 100,000 hits per month which is indicative of the overall public awareness and interest in the information now available, including access to food inspection results. The program enhancements were implemented in the interest of accomplishing EMD’s mission and educating both the retail food industry and consumers in order to reduce foodborne illness. We recognize that these efforts must be ongoing, and we intend to continue to seek innovative ways to improve our programs in order to improve food safety practices at the retail level and for over consumers, including over 1.4 million residents and over six million visitors of Sacramento County.