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Introduction

The San Francisco Department of Public Health’s Environmental Health Section strives to promote health and quality of life in San Francisco by ensuring healthy living and working conditions in the City. EHS currently is organized into four major divisions: Environmental Health Regulatory Programs, Children’s Environmental Health, Occupational Health, and the Program on Health Equity and Sustainability (PHES). PHES is the newest organizational unit in the Section whose efforts focus on worker rights, land use and transportation planning, environmental epidemiology, and food systems.

Environmental Health Regulatory Programs include those for retail food, residential hotels, massage, tobacco control, vector control, water quality, hazardous materials, lead poisoning prevention, site assessment and mitigation, solid waste regulation, noise, weights and measures, and agriculture. These programs work through community education, surveillance and assessment, enforcement, planning, and policy development. This report describes the Department’s environmental health regulatory programs, identifying 2004-05 significant accomplishments as well as future directions and challenges.
Agriculture Program

The security of the food supply, a need vital to human health, is often taken for granted. Protecting our agricultural resources from pests is an age old environmental objective that, with today’s global movement of goods and people, requires even more attention.

What we do...

The Agricultural Program protects health and safety by enforcing agricultural laws and regulations. The County Agriculture Commissioner has statutory authority to levy administrative fines for violations of these laws and regulations. Trained agricultural biologists of the agriculture program monitor pest conditions in agricultural and horticultural settings in San Francisco, including wholesale nurseries. Staff inspects plant material shipped to San Francisco through the postal, express and freight systems. Furthermore, we inspect plant products for export to a wide variety of foreign ports and issues export certificates required by importing countries. This work prevents the introduction of exotic pests harmful to California agriculture. Our Agriculture Program also manages the orderly burning of agricultural crop residues to minimize the impact on urban areas, and works with producers to find alternative methods of agricultural waste removal. Finally, we administer the hazardous material storage inventory and carry out inspections of those facilities related to agricultural operations.

The pesticide program, currently integrated with the agricultural program, provides public and industry education on safe pesticide usage and best practices in pest management. Staff issues restricted pesticide materials permits, monitors pesticide applications for safety and environmental compliance, and investigates pesticide related illnesses and complaints.

Accomplishments, Future Directions, and Challenges

- In September 2004, the Mayor’s Office dissolved the Department of Consumer Assurances and placed the Agriculture Program in the Occupational and Environmental Health Section. EH has since successfully integrated this program.
- In September 2005, EH created a new pesticide program staffed by a full time industrial hygienist. This program will provide new resources to protect San Franciscans from uncontrolled and unneeded pesticide use.
- EH is currently pursuing an inter-governmental agreement to provide interim services of a Sealer of Weights and Measures for San Francisco. We aim to recruit and hire a Sealer of Weights and Measures, a joint position with the Agricultural Commissioner, to manage the Weights and Measures and Agriculture Programs by September 2007.

The Agriculture Program regularly permits Farmers’ Markets to ensure that they are in compliance with State agriculture standards. This picture illustrates a seller at a farmers’ market that is in compliance with organic standards.
Body Arts Program

The practice of Body Art includes tattooing, body piercing and applying permanent cosmetics. Body Arts use procedures which often penetrate the skin with needles. If these procedures are not performed in a safe, hygienic manner, body arts can be a vehicle for transmitting life-threatening diseases such as AIDS and Hepatitis C.

What We Do...

San Francisco started its Tattoo Parlor Ordinance in the early 1960’s with input from local tattoo artists. The program involved semi-annual site inspections for sanitation and aseptic techniques and practices. In 1998, a new California law mandated all body art businesses and practitioners to be registered with Local Enforcement Agencies. The EH Massage Program now issues permits to all body arts establishments and inspects all body art establishments annually to enforce structural and operational requirements of our Health and Safety Code. EH also issues practitioner’s licenses and respond to all citizen complaints. We currently license a total of 45 body art establishments and 161 body art practitioners. The enforcement of structural and operational requirements include: keeping premises clean and hygienic; sterilizing all instruments used to pierce the skin; and, disposing safely all medical wastes.

Accomplishments, Future Directions, and Challenges

- In 2005-06, EH aims to provide training in aseptic methods in collaboration with the industry. We also hope to work with the industry on ordinance changes that will include requirements for a proficiency exam, blood borne pathogens training, and a practitioner photo ID card.
- The task of identifying and licensing transient practitioners remains a major challenge for EH.
Hazardous Materials Program

Exposure to toxic chemicals can cause negative effects on human health, such as cancer or birth defects. In order to protect public health and safety as well as environmental quality and economic vitality, the Hazardous Materials Unified Program Agency (HMUPA) inspectors assist businesses in compliance with State and local mandates for environmental quality and safety.

What We Do...

The EH Hazardous Materials Unified Program Agency (HMUPA) regulates over 2,400 San Francisco businesses including auto repair shops, manufacturers, hotels, gas stations, hospitals and various city facilities. Staff inspect and review hazardous waste generators, hazardous waste treatment facilities, hazardous materials business plans, underground and above ground chemical and fuel storage tanks, chlorofluorocarbon recycling, diesel back-up generators, and medical waste. In addition, HMUPA is the regulatory agency for chemical and biological hazards.

HMUPA’s Clean and Green Program is a pioneering environmental protection effort to help businesses adopt environmental friendly practices. Through the Clean and Green Program, DPH inspectors work beyond their regulatory requirements to assist businesses in reducing hazardous waste and effectively managing hazardous materials. Businesses that implement suggestions to lessen their impact on the environment are certified as “Clean and Green” and are acknowledged on the DPH website.

EH is also participating in the San Francisco Green Business Program, a partnership of City agencies that promote, recognize and provide hands-on support to local businesses that operate in an environmentally responsible way. In order to become a Green Business in San Francisco, an enrolled business meets criteria for conserving resources, preventing pollution and minimizing waste. Currently twenty-five businesses are enrolled in the program.

Accomplishments, Future Directions, and Challenges

- EH has helped many San Francisco business owners and operators switch to less toxic processes and practices. For example, SF wastewater treatment plants made process adjustments to reduce the amount of methane contained in their facilities. Only one electro plating facility in San Francisco still uses cyanide. Almost all operators of large refrigeration facilities have either reduced their use of anhydrous ammonia or switched their refrigerant to Freon.
- The total number of regulated facilities in all program elements is 2,470. This increase of approximately 8% is due in large part to the program’s increased emphasis on “field screening” – or the active identification of unregulated businesses. A California Environmental Protection Agency audit of the HMUPA program in 2005 took particular note of HMUPA’s efforts to identify unregulated businesses via field screening as well as its pollution prevention activities.
- HMUPA collected approximately $44,000 in administrative settlements from violators in 2005.
In 2005, staff conducted outreach efforts with City Departments that operate underground storage tanks to bring city agencies into compliance with new state regulations that required the naming of a “Designated Operator” (DO) for each location where there are tanks.

Forty-six businesses now meet the Department’s “Clean and Green” standards. User-friendly “green purchasing” guides are being developed for businesses to help them make better chemical decisions. EH received grant funds from the SF Foundation and from the Environmental Protection Agency for the Green Business and Clean and Green Programs.

While the Green programs recognize those businesses that have gone “beyond compliance” there remain a significant number of those in the regulated community that do not meet the award criteria due to one or more factors.

Many San Francisco businesses are small. Limited program knowledge of our program, inaccurate perceptions of regulations, limited financial resources, language barriers, and other cultural considerations, create some barrier to effective program participation.

Map I. DPH Clean and Green

This map illustrates where the San Francisco Department of Public Health Clean and Green Program sites are located.
This map indicates where the San Francisco Green Businesses are located.

This is a picture of a service station proudly displaying that they are DPH Clean and Green. This illustrates how regulated businesses use the Clean and Green designation to promote the environment and their commitment to it.
Childhood Lead Prevention Program

Children face a myriad of environmental hazards from chemical contaminants in food to poor indoor and outdoor air quality. Children are particularly vulnerable to environmental lead as their bodies are still developing, and exposure at critical moments of vulnerability can lead to permanent and irreversible brain damage. While exposures to lead can be controlled in part through regulations and standards, they also require broader social action, such as improving housing conditions.

What We Do...

The Childhood Lead Prevention Program is part of the Children's Environmental Health Promotion Program (CEHP) which promotes healthy settings for children to live, play and learn in, including safe homes, schools, and child care facilities. The Childhood Lead Prevention Program distributes educational material city wide to individuals, organizations, and medical providers. This year we conducted 96 environmental investigations; 48 investigations included case management for lead exposure. Where necessary we refer cases of lead exposure or lead hazard, to the Mayor’s Office of Housing Lead Hazard Remediation Program. We aim to provide all services in culturally competent way and educate, at a minimum, in English, Spanish, and Chinese. EH also works in collaboration with many other organizations and individuals to develop and implement the tools necessary to protect children’s environmental health. EH, the Department of Building Inspection (DBI), and the Mayor’s Office of Housing are engaged in an on-going effort to address environmental health hazards through systematic referrals and clearly defined roles for enforcement, public education, and access to available resources for hazard remediation.

Accomplishments, Future Directions, and Challenges

- CEHP implemented a citywide initiative to prevent consumption of lead contaminated Mexican candies (see box above).
- CEHP updated San Francisco Building Code 3407 to regulate safe work practices in rental property interiors.
- In 2005, EH will be working with DBI’s Housing Inspection unit, the SRO task force, and other tenant advocacy groups to ensure better code compliance for housing standards for families living in residential hotels.

Lead in Mexican Candies—Working with Communities for Policy Change

State and Federal warnings advise consumers that some candy products from Mexico are contaminated with lead. However, responsible agencies have not successfully prevented the import and sale of these candies. In 2005, CEHP conducted a survey of community consumption of lead in Mexican Candy and published findings in a special newsletter. CEHP also identified 7 San Francisco lead poisoning cases thus far where lead candy might have been a contributing source. Based on this data we developed a targeted community outreach strategy including a media campaign in Spanish language papers, radio, and television. We made community presentation to schools with Latino students and educated medical providers. Based on surveillance of 414 retailers we identified where the contaminated candy was sold and notified retailers about the potential hazards. Following these efforts, we drafted a resolution adopted by the Board of Supervisors encouraging swifter DPH and federal and state agency actions. As a result of this initiative, sixty one stores removed the candy—a 57% decline.
Emergency Response and Disaster Planning

Hurricane Katrina underscored the need for effective disaster response to natural and man made events. Inadequate disaster planning can delay response for days and exacerbate morbidity and mortality to the affected public. The Bay Area can expect a major earthquake to occur within the next 30 years and San Francisco must be prepared to provide needed services to its citizens and neighboring counties. In addition, San Francisco is a relatively high target for a terrorist attack. EH expertise in setting up shelters, ensuring water quality and sanitation, and preventing exposures to hazardous materials is an integral part of the City’s disaster response.

What We Do…

As the operational unit (Environmental Assurance and Safety) within the Department of Public Health Incident Command Structure, Environmental Health participates in disaster planning activities. EH reports to the DPH Departmental Operation Center (DOC), and during a declared disaster or activation of the DOC, EH will establish its own command post at its offices at Fox Plaza. EH is responsible for drafting sections of the DPH Emergency Operations Plan. EH also obtains equipment for and provides training to First Responders for chemical, biological, radiological, nuclear and explosive (CBRNE) incidents. EH serves as a member of the SFFD Hazardous Materials Team provides consultation to the City departments on purchases of hazardous materials equipment, and provides training for hazardous materials technicians/specialists.

Accomplishments, Future Directions, and Challenges

- In 2005, EHS hired an industrial hygienist through Urban Area Strategic Initiative (UASI) grant. The new staff is establishing calibration and maintenance procedures for hazard materials and CBRNE equipment and assisting in the purchase of new CBRNE detection equipment and providing training on this equipment.
- Adequate preparation of all Environmental Health staff for a disaster is an ongoing challenge. In 2005, EH trained many staff to be part of DPH Departmental Operation Center and activated the Environmental Health Command Post as part of statewide drill.
- In 2005-06, EH plans to update response plans and develop standardized checklists for disaster operational procedures.

Our section participates in a number of disaster and emergency response simulations. This picture shows our participation in an emergency drill conducted at one of the United States Postal service sites in San Francisco.
Management Information Systems

MIS includes all the components that collect, manipulate, and disseminate data or informational resources for EH, including hardware, software, people, communications systems such as telephone lines, and the data itself. The day to day functioning of the entire environmental programs requires effective and efficient management information systems (MIS).

What We Do...

EH MIS includes four staff people responsible for development and maintenance of the program website; administration of telephone services; database development, implementation, training, and maintenance, Lotus Notes support; Local Area Network maintenance and support; and general hardware support. MIS objectives consistently focus on meeting the ever expanding information needs of EH staff with emphasis on user training, database needs, equipment and overall user support. Databases developed in-house contain all of the data environmental health regulatory programs. MIS also facilitates staff accessing and analyzing the data for environmental health decision making, planning, program implementation.

Accomplishments, Future Direction and Challenges

- Growing EHS programs and responsibilities have created increasing requests for large scale, programmatic databases.
- In 2005, MIS staff redesigned the website for EHS and developed a new website for CEHP and PHES.
- Requests for program data grow with the public awareness of environmental issues. The EH interactive tool for viewing food inspections and violations is the most visited page on the entire SFDPH website.
Food Safety Program

San Franciscans expect food to be free from physical, chemical or microbial contaminants. Of these contaminants, microorganisms present the highest burden on health. Microorganisms such as E. coli, Salmonella, Campylobacter and Listeria grow in many foods and safe food preparation is necessary to prevent food-borne illnesses. In the USA, diseases caused by the major pathogens alone are estimated to cost up to US $35 billion annually (1997) in medical costs and lost productivity.

What We Do...

The EH Food Safety Program includes the following four principal functions:

- Issuing permits to operate, construct or remodel any retail food facility such as restaurants, bars, markets, concession stands, food pushcarts, mobile food units and special events;
- Conducting routine inspections of food facilities to ensure safe food preparation practices;
- Providing education & training to employees of food facilities and to the public;
- Making transparent the results of food inspections through posted reports and the website.

California Assembly Bill 1978—the Campbell Bill—mandates every retail food preparation facility to have a certified food safety person on staff. Ideally, individuals who pass an accredited food safety examination take the information gained back to their facilities and train the rest of the staff. EH offers a Certified Food Handler training program which trains retail food professionals on the causes of food poisoning; time and temperature controls; cross contamination; cleaning and sanitizing; and pest control. Last year, the San Francisco Board of Supervisors amended the San Francisco Health Code to recognize high standards of food safety. The “Symbol” ordinance also requires retail food establishments to post their current inspection report on the premises. Health Inspectors also calculate a score based on the violations observed during routine inspections, giving weight to violations recognized as having more serious risks for food safety. Such violations include improper holding temperatures, inadequate cooking, poor food handler hygiene, contaminated equipment, and unsafe food sources.

This is a picture of Chinatown restaurant workers and managers after successfully completing a comprehensive compliance education training in food safety and sanitation; this particular restaurant received a score of 90.

Accomplishments, Future Directions, and Challenges

- In order to implement the “Symbol” ordinance, EH developed a new inspection report and inspection scoring system. EH will soon begin awarding a “Symbol of Excellence” to establishments where three...
consecutive unscheduled inspections result in scores greater than 90. While the majority of restaurants are scoring greater than 90 on routine inspections, inspectors observe that new requirements to post inspection reports and score establishments can result in greater operator attention to food safety practices. The Food Safety Program is currently working with the Art Commission to create a graphic for the “Symbol of Excellence.” The general public can view food safety violations and current scores for all San Francisco restaurants at www.sfdph.org/eh/food/index_symbol.htm.

- EH pilot tested a team approach to food safety compliance education program in Chinatown this year. Inspectors worked in teams with restaurant owners, managers and workers to educate and to provide technical assistance. Some restaurants voluntarily closed for periods of time in order to re-certify food safety handlers, incorporate better food sanitation procedures, and correct violations. EH anticipates this program may become a model for a citywide compliance education program.
- EH is currently going through a re-organization which will replace the prior organization with five geographically based ‘health districts’ with one citywide food safety program with two co-managers. Next year, the program will seek ways to improve food safety compliance among restaurants by identifying neighborhoods with food safety challenges using GIS techniques.
- The high cost of housing in San Francisco along with a Statewide shortage of trained environmental health inspectors have made maintaining full staffing a challenge in 2005.

Map III. Food Scores. The lightest areas indicate that over 90% of the facilities have scored above 90.
Residential Hotels Program

In 2004, San Francisco had over 19,000 residential hotel rooms which provide shelter for San Francisco’s poorest residents. The typical Single-Room-Occupancy rental unit does not have a bathroom / toilet or a kitchen. It is only a single room, usually equipped with a small hand sink and a bed. Tenants must necessarily share the 1 or 2 common area's toilet and shower facilities on each floor of the building. In many of these hotels, slum conditions are common, with overcrowding, insufficient bathrooms and kitchen facilities, and poor sanitation. Exposures to mold, vermin and other environmental hazards due to substandard conditions cause adverse health impacts in tenants and adversely impact citywide efforts to control rodents and other disease vectors.

The picture below illustrates a typical SRO rental unit.

What We Do...

In 1984, Mayor Diane Feinstein ordered the County Health Department's Bureau of Environmental Health to develop and implement a code compliance program to address sanitation concerns in the City's residential hotels, emergency shelters, and other transitional living arrangements. Today, the Residential Hotel Program currently inspects all residential hotels leased by a city agency, all shelter and drop-in facilities, and all privately operated SROs inhabited by families with children. With two full-time senior inspectors the program has a current inventory of 23 emergency family shelters, 2 drop-in centers and 158 Single-Room-Occupancy (SRO) hotels. The program conducts inspections of all rooms in each hotel to ensure that they are safe, sanitary and habitable conditions. The program also responds to complaints in all hotels, motels and boarding houses in the City and County of San Francisco. The frequency of inspections is determined by annual baseline (comprehensive inspections) site visits that establish a rating. The frequency of visits varies - referrals from City & County agencies are prioritized.
In San Francisco, housing health and safety concerns are also the responsibility of Department of Building Inspections or Public Works who are funded through business license fees to inspect all multi-unit dwellings routinely.

**Accomplishments, Future Directions, and Challenges**

- Environmental exposures in housing could be better prevented if owners and operators of housing maintain their dwellings. For example, patching holes in ceilings, floors, and walls prevent cockroach and rodent infestation. Amendments proposed for the San Francisco Health Code will require owners to structurally exclude pests from living areas and increase fines and penalties for property owner not complying with health and safety requirements.
- EH hopes that collaborations in 2005 with community organizations in the Mission, Chinatown, and the Tenderloin that aim to develop better communication among city code enforcement staff and tenants will significantly reduce tenant barriers to reporting complaints.
Massage Program

Massage is increasingly recognized as an important healing arts practice. Ensuring safe and clean working spaces for the practice of massage protects massage practitioners and clients from health and safety risks.

What We Do...

In 2004, the City transferred responsibility for licensing and regulating massage practitioners and businesses from the San Francisco Police Department to the Health Department. Under new health code requirements, the EH staff license and regulate massage practitioners and businesses. Staff review and approve plans for new construction or major remodeling, conduct annual inspections of massage establishments, and respond to citizen complaints regarding unsanitary conditions. In 2005, EH licensed a total of 110 massage establishments including 78 establishments transferred from the SFPD and are currently processing 52 establishments. We also permitted a total of 1,240 massage practitioners including 517 that were transferred to our program.

Accomplishments, Future Directions, and Challenges

- EH conducted two (2) Public Hearings to educate practitioners, massage business owners about the law, rules & regulations and expectations.
- The massage program, including administering practitioners’ exams, issuing computer generated ID cards and gaining agency approvals, has required more time and resources than expected. In 2004-05, the costs of administrating and enforcing the massage program have also exceeded program fees.
- The challenge of human trafficking in massage establishments has required additional time and close cooperation with SFPD, Federal, City Attorney, City Planning and other City Agencies. Currently, ten trafficking cases from the U.S. Department of Justice will be heard at a Director’s Hearing for permit suspension or revocation.
- In 2005-06, EH anticipates working on ordinance changes in cooperation with the Mayor’s Massage Establishments Task Force and other City Agencies.
Noise Program

Loud noise affects our health in many ways. Hearing loss is the most well-known effect of loud noise. Increased heart rate, blood pressure, and changes in blood circulation are other potential consequences of sudden loud noises. Chronic exposure to moderate levels of environmental noise results in poor quality, interrupted sleep that may cause both physical and psychological problems. Noise interferes with speech communication in the workplace and in the schoolrooms, interfering with the ability of people to perform their work. Traffic noise may also prevent pedestrians from hearing cars approaching. Noisy environments give individuals and their community the feeling of powerlessness, because they cannot even control the environment within their own home.

What We Do...

The enforcement of our local San Francisco Noise Control Ordinance (Article 29, MPC) provides a safety net for individual and communities negatively affected by noise. The Department responds to complaints regarding excessive noise associated with fixed mechanical equipment such as a restaurant ventilation system or a compressor in an automobile body shop. Although remediation is no substitute for good planning, it does help to prevent some of the many physical and psychological health consequences of noise exposure.

The EH Noise Program also works with the Building and Planning Departments to create an updated Noise Element and Noise Map for the City’s General Plan. The task is to define the current noise level throughout San Francisco with special emphasis on understanding the effects of traffic volumes on the acoustical environment. This information will be used to make planning and building decision related to sighting and insulating on new residential construction. As the demand for new residential housing continues, the available locations for development are frequently found in the noisiest locations (e.g., residential developments directly below the Bay Bridge).

Finally, the Noise Program is supporting the Office of Emergency Services and the Department of Technology and Information Systems in evaluating the acoustical coverage and design of the outdoor emergency warning system.

Accomplishments, Future Directions and Challenges

- The Noise Program is developing statistical modeling techniques in partnership with UC Berkeley's School of Public Health to better understand the relationships between traffic and ambient noise level. In the context of this work, the program is conducting monitoring and surveillance of point area sources of noise which impact the ambient environment. Using these techniques, we hope to help ensure that new residential housing in those areas is constructed according to acoustical building standards.
- Increased use of mechanical equipment is required by modern building code and fire codes, and acoustical impacts must be anticipated and protection for exposed residents and communities incorporated into the design of these new systems. This problem is especially acute in neighborhoods where residents do not complain about noise problems due to their unfamiliarity with the law and their poor language skills. EH is investigating ways to encourage better design and planning of new mechanical installations and the purchase of equipment that produces lower noise levels.
- EH will seek sustainable funding for the Noise Program to support noise prevention and control activities.

Map IV. Transportation Noise Map

This map represents areas of risk for high noise levels as defined by traffic volume. Yellow areas indicate areas of risk for high noise levels. Blue areas represent public land and green areas are city lots.
Site Assessment & Mitigation

Human activities often can lead to a hazardous contamination of air, soil and water, later resulting in the need to clean up—mitigate—contaminated properties. Government agencies like SFDPH have a critical role in ensuring contaminated properties are cleaned up in a way that protects health.

What We Do...

The EH Site Assessment and Mitigation Program includes the Local Oversight Program (LOP) and the Site Remediation program. The Local Oversight Program is a grant funded program that gives the Department of Public Health (DPH) the authority to enforce laws and regulations to address leaking underground storage tanks and the impact to drinking water and groundwater. LOP is responsible for identifying responsible parties that owned or operated leaking underground storage tanks that often contained gasoline, diesel, motor oil and other petroleum hydrocarbons. The LOP has the authority from the State Water Quality Control Board to order the evaluation of the extent of onsite and offsite contaminants, monitoring and remediation. Remediation efforts can include over excavation, soil vapor extraction, dual phase extraction to address soil and groundwater, bioremediation and the use of ozone to address soil and groundwater impacts by petroleum hydrocarbons. LOP works closely with the State Water Quality Control Board, the Regional Water Quality Control Board and the Bay Area Air Quality Management Districts. Upon satisfactory remediation or mitigation, LOP issues a “no further action” letter to the responsible party.

The Site Remediation program enforces three San Francisco ordinances that address soil and groundwater contamination from past human practices. These ordinances include the Article 22A (the Maher ordinance), Article 21 (the Voluntary Remedial Action Program), and Article 31 (Hunter’s Point). Corporations, real estate developers and local and state agencies may enter into a voluntary cleanup program agreement with DPH, or are mandated to comply with Article 22A prior to receiving a permit from the Department of Building Inspections when constructing in the filled areas of San Francisco’s original 1851 shoreline, or must comply Article 31, prior to construction within the Hunter’s Point designated area. The City Planning Department may also require a project proponent to submit environmental documents to DPH for review. Using current federal and state laws, regulations, cleanup levels and health risk assessments along with deed restrictions as administrative controls, Site Remediation can return property to productive use through addressing human health exposure before, during and after construction.

Accomplishments, Future Directions, and Challenges

- In 2004-05 LOP entered 58 new groundwater and soil contamination cases to the active caseload and issued “no further action” certificates to 71 cases were issued
- LOP passed the triennial State audit which included review of fiscal, administrative and case handling practices.
- In 2004-05, the Site Remediation Program reviewed seventeen projects within the Mission Bay Project Area which included: CalTrain improvements, the Gladstone Foundation building, the new Stem Cell Research Building, three UCSF buildings, two park parcels, infrastructure improvements, mixed use buildings and residential buildings. Site Remediation also reviewed several large development projects citywide, including the San Francisco Center, North Beach Hope VI Redevelopment, Valencia Gardens,
the New Central Subway Alignment, Laguna Honda Hospital, Pier 64, and the San Francisco Reliable Energy Project.

- This year, EH also developed new regulatory requirements under Article 31 of the Health Code to add an additional layer of caution and protection during the redevelopment process at the Hunter’s Point Shipyard. The ordinance will require available best practices for mitigation, soil transport, and monitoring for contaminated areas to prevent potentially harmful environmental exposures.

This picture shows underground storage tanks that were found to be leaking and impacting on drinking water and ground water.
Solid Waste Enforcement and Management

Improperly disposed solid waste creates environmental health problems because it can provide harborage and food for rodents, creates odors, and contributes to community blight. The California Public Resource Code requires all cities to make adequate provision for solid waste handling and to reduce, recycle and reuse solid waste generated in the state to the maximum extent feasible. California law also directs cities to regulate solid waste landfills and to ensure that new solid waste landfills are environmentally sound.

What We Do...

For San Francisco, EH is the local enforcement agency (LEA) for state and local solid waste laws and regulations. The EH permits solid waste facilities and inspects collection equipment, transfer stations, and disposal sites to verify compliance with standards for the protection of the environment and the public health. EH may conduct an enforcement action if, during an inspection, it finds any violations of state or local standards.

The illegal dumping of solid waste is a problem that has been recorded since the early days of San Francisco. EH is responsible for ensuring that all residences and businesses in San Francisco have refuse collection services and that all the solid waste is handled as required by law. EH puts a lien on property whose owners fail to pay solid waste collection service bills.

Accomplishments, Future Directions, and Challenges

- During FY 2004-05 the Solid Waste Program recorded over 6000 liens on properties for failure to pay solid waste collection service bills
- In 2005, EH issued its first permit to a biomaterial reuse facility. The facility intends to collect up to 100 tons per day of organic material, from restaurants, produce markets, institutions and select residential customer and process the material so it can be used by a waste-to-energy cogeneration facility. San Francisco’s food waste will ultimately become used as heat and energy. EH also permitted a green waste chipping and grinding operation. This facility will serve as a drop-off facility for green wastes landscapers, gardeners and households. The material will be recycled for use as soil amendment, mulch and/or as a bio-fuel for energy production at a co-generation plant. It is anticipated that once this green waste operation is fully operational, up to 200 cubic yards per day of green waste will be diverted from landfills.
- In 2005, the EH LEA program assisted in drafting legislation to monitor environmental impacts of development at the former Hunters Point Shipyard and reviewed a proposed ordinance to promote and increase recycling of construction and demolition debris.
- EH enforcement activities resulted in the closure of three operations that received and processed construction and demolition debris, who did not meet the State’s minimum standards for health and environmental protection.
Environmental Tobacco Control

Each year, 730,000 children less than 18 years of age become new regular, daily smokers. Smoking related monetary costs due to health care services and lost economic productivity total $157 billion annually. California Penal Code section 308 prohibits the sale or furnishing of cigarettes, tobacco products and smoking paraphernalia to minors, as well as the purchase, receipt, or possession of tobacco products by minors. Despite these state and local restrictions, minors continue to obtain cigarettes and other tobacco products at alarming rates. In a 2002 California youth buying survey, 19.3 percent of retailers surveyed unlawfully sold tobacco products to minors. Despite active enforcement by the San Francisco Police Department, the rate of illegal tobacco sales documented by the Police Department in San Francisco ranges between 20 and 25%.

What We Do...

EHS enforces Article 19 H of the San Francisco Health Code which was passed in 2004 to help prevent illegal sales to minors. This law requires retail tobacco vendors to obtain a tobacco sales permit. Legal responsibilities associated with the privilege of selling tobacco products include not selling tobacco to minors, locking tobacco products in a cabinet or placing them behind the counter, and not selling individual cigarettes. EH issues a permit to businesses conditional on their compliance with these terms. We suspend or revoke these permits where we have evidence that a business has illegally sold tobacco to minors. In doing this work, EH works closely with the Tobacco Free Coalition and SFPD on investigation and enforcement.

Accomplishments, Future Directions and Challenges

- In implementing a new permitting process for retail tobacco, EH revised inspection forms and procedures, processed 1,200 applications, and responded to hundreds of public inquiries.
- In 2005 alone, EH brought 39 cases of alleged illegal sales to minors to the SFDPH Director’s hearing and served suspensions to 24 establishments.

Our Section works collaboratively with City agencies and community groups to enforce the San Francisco Health Code regarding tobacco sales.
Vector Programs

Disease producing organisms can be spread from animal-to-animal or animal-to-human through a variety of routes. Vector borne diseases are diseases which are commonly transmitted through vectors. Vector is a term used broadly to refer to any animal that transmits human disease or plays an essential role in the disease producing organism’s life cycle. Vectors include the anopheline mosquitoes of malaria, snail hosts of schistosomiasis, or rodent reservoirs of leshmaniasis. A number of vector borne diseases occur in California. West Nile virus (WNV) is a relatively new vector borne disease and the subject of much media attention. Human infection with WNV results in an unapparent or mild disease in most cases, but it can also be severe or even fatal for the elderly and the immune compromised.

What We Do...

EH coordinates, implements, and monitors the City’s vector control response with guidance from the California Department of Health Services, Vector-Borne Diseases Section. Many EH inspectors and technicians are State-certified to perform and guide vector control. EHS certified vector technicians and the City’s pest control contractor investigate all reports of vector activity and attempt to effect environmental changes to prevent vector activity.

EH coordinates and monitors the City’s preparation and response to West Nile Virus. A key prevention goal is to eliminate or treat mosquito-breeding sources (standing water) with biological or least-toxic larvacides. A network of local public agencies has joined with DPH and community stakeholders to develop individual agency response plans, provide staff education, issue press releases, and to do community outreach, especially to the senior community.

Accomplishments, Future Directions, and Challenges

- In late 2004, EH technicians began to use CO2 traps to collect and analyze mosquitoes to monitor the effectiveness of our control efforts. Next year, EH plans include conducting local in-house testing of dead birds of the Corvid family, thereby avoiding the usual 2-week wait for results from the lab at UC Davis.
- The 2005 “Fight the Bite” campaign this year included newspaper ads, DPH press releases, brochures, updated web site, posters and “bus backs” on MUNI buses. Staff distributed multi-lingual information about the importance of avoiding mosquito bites, with samples of mosquito repellents, at all of the City’s Health Centers, and a number of neighborhood events and health fairs. New this year is an on-line pest complaint link from the EHS mosquito control web page.
- In 2005, the SF Public Utilities Commission, as part of their agency response plan, began to routinely inspect and control mosquitoes breeding in public catch basins and sewers, with monthly treatments from late spring to early fall.
- In 2005, the State awarded EH Mosquito Control program up to $175,000 for additional mosquito control technicians, equipment and supplies. EHS will utilize these funds to enhance and enforce mosquito control on private properties.
This map illustrates the location of mosquito complaints that our Vector Control Program responded to in 2004-2005.

This is a picture of a catch basin that is being treated with mosquito larvicide. The city’s more than 20,000 catch basins have been treated in order to stop the spread of West Nile Virus. This is an interagency effort involving San Francisco Public Utilities Commission, Department of Recreation and Park and our Section. For more information see our “Fight the Bite” campaign at: www.sfmosquito.org
• In 2004, EH conducted a Rodent Abatement Pilot program to reduce infestations in the Chinatown neighborhood. EH staff provided inspection, enforcement and compliance education support in the context of joint inspections with the Department of Building Inspection EH also implemented a neighborhood specific environmental survey. The pilot program's evaluation suggested that the limited scope was a significant barrier to the effectiveness of rodent control actions. For example, the rodent population may have moved from building to building. A major success of this pilot program has been the collaboration between the San Francisco Department of Public Health and the San Francisco Department of Building Inspection.

• Sustainable control of the rodent population requires attention to root cause factors such as the structures of buildings and the sewage system. Based on the results of the pilot program as well as observations from enforcement activities citywide, EH aims to develop a citywide rodent control plan for 2005-06 including facility rodent control plans for all city agencies and coordinated inspection and enforcement activities among inspectors of environmental health and the building department.

Map V. Rodent Complaints in San Francisco

This map illustrates the location of rodent complaints that Environmental Health responded to in 2004-2005.
Water Quality Program

Sufficient, clean water is essential for life. While San Francisco residents obtain drinking water from reservoirs in the Sierra Nevada Mountains, San Francisco also has a number of important underground aquifers. Protecting the waters from contamination and from overuse protects health and the environment. In the city, drinking water can become contaminated by cross connections with non-potable water systems. Boiler compounds, cooling tower waters, wastewater, irrigation waters, etc, can backflow into the domestic water system if there is a direct connection between the two systems. The groundwater can be contaminated by improper construction and abandonment of wells and soil borings. Also over pumping of the groundwater can decrease the levels in our lakes and cause salt water intrusion and subsidence of land.

What We Do...

The Water Quality Control Program assures San Franciscan’s safe water provided in a variety of ways. Health related complaints regarding the domestic water are investigated by the Water Quality staff. The program tests the domestic water when needed. Coordination occurs with the San Francisco Public Utilities Commission (PUC). EH staff also participates in the City’s Groundwater and Recycling Master Plan.

The Program enforces the San Francisco Health Code in certifying backflow assembly testers, ensuring that the backflow assemblies are tested upon installation and yearly thereafter, and conducting cross connection control inspections. All testers in San Francisco are required to pass an exam and be certified by EH. All backflow assemblies must have a current decal displayed on the device indicating that the assembly was tested by a certified tester. Coordination occurs with the San Francisco Public Utilities Commission (PUC) and the Department of Building Inspections.

EH also enforces the San Francisco Health Code in inspecting wells and soil borings. All wells in San Francisco are permitted by the Health Department. Construction and destruction of wells and soil boring are inspected and approved by the Water Quality staff.

Accomplishments, Future Directions, and Challenges

- In 2005, the San Francisco Board of Supervisors adopted EH sponsored Health Code amendments to specify the procedures and requirements for constructing, modifying, operating and destroying soil borings and production and monitoring wells. The new Code will help protect local groundwater resources from pollution or contamination and over drafting by regulating well drilling and soil boring on private and public property.
- EH staff developed a customized water data base which has resulted in fewer forms and increased inspector field time and program revenues. EH will be creating a Geographic Information System for all wells located in the City.
- Working with the PUC and the City Attorney’s Office, EH established policies to correct delinquencies in the annual requirements for backflow prevention testing. We anticipate enforcement actions based on these policies will result in a 95% compliance rate.
- Next year, EH plans to seek Health Code amendments for Cross Connection Control.
Weighing and measuring operations, to a greater or lesser degree, enter into the distribution and sale of all the necessities of life, particularly of food and fuel. The assurance of accurate weights and measures, as well as maintaining agricultural standards is of vital interest and concern to all residents of San Francisco, especially to members of the population with the least economic resources.

What We Do...

The Weights and Measures Program has the responsibility of maintaining standards of measurement for consumers at the marketplace and various industries. Inspectors verify the standardization of transactions of purchased consumer goods sold by weight, volume or count, including scanner pricing and labeling on prepackaged or bulk commodities. In addition, this program implements the inspection and testing of commercial weighing and measuring devices, to assure their accuracy. Such devices include grocery store check-out stands, gas pumps, gas and electric meters and other devices used to measure, weigh or meter consumer goods, including large and small capacity scales. Finally, the program conducts sampling of petroleum products at commercial locations for quality. The Sealer of Weights & Measures has statutory authority to levy administrative fines for violations using the State’s business and professions code.

Accomplishments, Future Directions, and Challenges

- In September 2004, the Mayor’s Office dissolved the Department of Consumer Assurances and placed both the Weights and Measures Program in the Environmental Health Section. EH has since successfully integrated this program.

- Weights and Measures Program has a total number of 1,850 registered locations and 11,098 devices which require inspection annually. In 2005, the program saw increases in inspection units of service. The total inspections performed in the Weights and Measures Program increased by 115% to 447 and the number of locations visited increased by 163% to 142 places. In addition, there were increased notice of violations by 28% and a 52% decrease in the percentage of facilities that were out of compliance.

- EH is currently pursuing an inter-governmental agreement to provide interim services of a Sealer of Weights and Measures for San Francisco. We aim to recruit and hire a Sealer of Weights and Measures, a joint position with the Agricultural Commissioner, to manage the Weights and Measures and Agriculture Programs by September 2007.

This picture shows a sealed taximeter. All taxis in San Francisco are inspected by our Weights and Measures Program and taximeter devices are sealed when they pass inspection.
Asbestos Program

Although the use of asbestos and asbestos products has dramatically decreased, asbestos containing building materials are still common in most residential, public and commercial buildings in the City. During construction and renovation, specialized procedures are required to handle asbestos-containing materials to prevent the release of asbestos fibers. However, it is still surprisingly common for building owners and contractors in San Francisco to handle asbestos improperly, causing the release of asbestos fibers and threatening to harm workers, public health, and the environment. Exposure to airborne asbestos fibers continues to cause several diseases including lung cancer and mesothelioma. Asbestos will be with us for many years to come, challenging regulatory agencies and building owners to continue to enforce handling requirements and to maintain awareness.

What We Do...
The Asbestos Program strives to protect the health of City employees and to promote safe handling of asbestos in privately owned buildings. The Asbestos Program supports City Departments, and helps to protect City workers and the public, through the identification, assessment and management of asbestos in City-owned or City-occupied buildings. The Asbestos Program also helps to minimize the affect of illegal asbestos work on the public health through code enforcement-related work and by promoting efforts to educate contractors and property owners.

Accomplishments, Future Directions, and Challenges

- In 2005, the Asbestos Program continued to be very involved with other local regulatory agencies, including Cal-OSHA and the Bay Area Air Quality Management District to enforce the cleanup of sites contaminated with asbestos due to illegal asbestos removal work.
- In 2005-2006, the Asbestos Program will be more involved in housing settings to assess and abate asbestos hazards for San Francisco tenants.
- Community outreach and education is a constant challenge. The Asbestos Program will continue to look for opportunities to work with outside agencies, such as property managers and trade associations, to promote and support their efforts to educate to their members about asbestos issues.

This picture illustrates the clean up of sites contaminated with asbestos.
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