

Program Services: Use and Storage



7

7. Program Services: Use and Storage of Hazardous Materials

The Program offers an array of services to promote the proper use and storage of hazardous materials and to encourage the use of less hazardous alternatives. The Program also promotes the proper storage of hazardous wastes. Some of these programs focus on residential use of hazardous materials. Other programs focus on hazardous materials used by businesses and other conditionally exempt small quantity generators (SQGs). Many of these programs provide outreach and technical assistance to both audiences. In 2009, these efforts comprise approximately 30 percent of the Program's budget.

Information, education and outreach to King County residents and businesses are provided through the Program's Web site, brochures, fact sheets, reports, telephone hotlines for households and businesses, a Garden Hotline, at workshops and training events, and through technical assistance visits to businesses.

In addition to providing information, the Program supports efforts to reduce and properly manage hazardous wastes by promoting the exchange of hazardous materials through the Industrial Materials Exchange program (IMEX), providing financial incentives, and by recognizing businesses that reduce pollution through the EnviroStars business recognition program. Finally, the Program works to promote environmentally preferable purchasing and other institutional and policy changes that reduce the use of hazardous materials.

7.1. Providing Information

7.1.1. Web site

The Program's Web site provides information about ways in which residents and businesses can reduce the use of hazardous materials, and how they can properly store and dispose of these materials. The site was redesigned in 2009. The new site, which was launched in February 2010, provides information on ways to reduce the use of hazardous materials including information about safer alternatives. It complies with disability standards for the visually impaired and meets the Worldwide Web Committee Standards for people with disabilities. Brochures and other documents that have been translated into alternative languages are available on the site. In addition, the Program is evaluating the potential of social networking and social media tools to deliver its messages and communicate more effectively with certain audiences.

7.1.2. Print Materials

A wide array of brochures, fact sheets and reports are available to help residents and businesses reduce their use of hazardous materials and manage dangerous materials safely. For example,

residents can obtain information on how to reduce chemicals in their homes and yards. They can find information about reducing chemicals, such as pesticides, in their diets. They also can find out about alternatives to harsh cleaners. Businesses can get information about properly storing hazardous materials, best management practices, and strategies for reducing their use of toxic and hazardous materials. There is also information about state and federal hazardous waste regulations and the Program's services for businesses. Many documents are available in print, and most can be downloaded from the Web site. Materials can also be requested by calling the Program's customer service phone lines.

7.1.3. Customer Service Phone Lines

Customer service phone lines provide information to residents, businesses, staff of agencies and others about ways to reduce the use of hazardous materials, as well as guidance about how to safely use, store and transport these materials. The phone lines operate during regular business hours. The Household Hazards Line answers questions from residents and the Business Waste Line responds to hazardous waste questions from businesses. In addition, the Program funds a Garden Hotline that provides information to callers about non-pesticide approaches to managing gardens and landscapes, also known as integrated pest management (or IPM). Staff at all three customer service phone lines can also be contacted by e-mail.



7.1.4. Workshops and Trainings

The Program promotes toxics reduction and safe handling of hazardous materials through workshops and training events. These include workshops for the general public and training for professionals



on integrated pest management and green gardening. Landscape professionals from landscape companies, nurseries, garden suppliers, public and private groundskeepers, and horticultural students have attended these events. The Program also provides training to the staff of government-subsidized housing facilities about integrated pest management and the use of pesticides for indoor pests. Program staff have made presentations to new parent groups, preschool cooperatives, and preschool teachers about ways to reduce children's exposures to hazardous materials. In collaboration

with community partners, the Program has sponsored regional conferences and training events on a variety of topics and has conducted outreach about hazardous products at community festivals and fairs.

7.1.5. Technical Assistance

The Program provides technical assistance to businesses, government agencies, residents and others, to help them reduce the use of, and exposure to, hazardous materials. Technical assistance visits by Program staff to small quantity generator businesses help explain regulatory requirements and provide guidance on best management practices for a particular industry and its waste. In some cases, Program staff collaborate with suburban city partners to conduct technical assistance visits; other visits may be made as part of an incentive program or in response to complaints. The Environmental Quality Team (EQT) conducts technical assistance visits for the Program.



7.2. Business Services

7.2.1. Industrial Materials Exchange (IMEX)

One strategy for reducing hazardous waste is to encourage businesses with a waste material to make it available to businesses that can use the material. The on-line listing service known as the Industrial Materials Exchange (IMEX) is designed to help King County businesses find markets for industrial by-products, surplus materials and wastes. Through IMEX, businesses generating waste material can be matched with businesses that can use the material as an input to their manufacturing process: this transfer reduces waste, on the one hand, and eliminates the need to obtain materials from new sources, on the other. Businesses, offices, schools, and individuals in the Pacific Northwest advertise their surplus or unwanted materials or request materials that they need. There are no fees for using IMEX.



7.2.2. Voucher Incentives and EnviroStars

The Voucher Incentive and EnviroStars programs provide incentives to businesses and other small quantity generators to encourage the proper use and management of hazardous materials and wastes. The programs also support business investments in equipment or processes that will reduce the use of hazardous materials. The Voucher Incentive program provides up to \$500 in matching



funds to qualified businesses to help them reduce hazardous chemical or material use, participate in green purchasing, try out less toxic chemical alternatives, and/or improve storage of hazardous materials and wastes.

The EnviroStars business recognition program promotes hazardous material reduction and safe storage by certifying and marketing qualified businesses. Through the EnviroStars certification process, small quantity generator businesses are certified on a two- to five-star scale. Stars are awarded for the steps a business has taken to manage and reduce its use of toxic and hazardous materials, and for the leadership the business has shown in influencing other businesses. EnviroStars-certified businesses receive window decals and signs, are promoted on the Program's Web site, and are published in the Program's annual Green Business Directory. Businesses with higher star ratings receive marketing assistance. The Program also conducts media campaigns to encourage residents to support EnviroStar businesses. Another aspect of the EnviroStars program is the recognition of larger firms as "Co-stars" for taking on a leadership role.

7.3 Product Alternatives

The Program is developing information about alternatives to hazardous products. One area of focus is "green purchasing," that is, promoting the purchase of materials or items that have fewer adverse effects on human health and the environment than currently-used products. Comparisons of products consider their entire life cycle, from production to final disposal. One example of green purchasing is replacing toys that contain lead in their paint or components, with lead-free toys. Another example is replacing mercury-containing thermometers and thermostats with mercury-free models.

7.4. Priority Materials

In 2006, Program staff reviewed health and environmental studies, technical reports and other data, and selected priority materials, to focus the Program's efforts. Priority materials addressed by the Program include art supplies, pesticides and certain high risk solvents. As well as promoting less toxic alternatives, the Program addresses the safe use and storage of hazardous materials, if they must be used.

7.4.1. Art Products

Healthy Schools project staff have found that art products contained some of the most hazardous materials present in the school. Many of these products are also used by the broader art community. As a result, the Program has begun working to reduce the use of art materials with hazardous components through our new Art Chemicals Hazards Project. It is identifying and working with

partners in this industry. Program staff have been exploring the possibility of providing training about hazardous materials in art curricula. They have found some secondary schools willing to undergo kiln dust sampling for indications of leachable toxic metals. They also have created information to support this work, such as using the chemical evaluation tools in the School Chemicals and Solvents databases, and consolidating the on-going research data on chemicals, their hazards and stakeholder feedback on the use of alternatives.

7.4.2. Pesticides

The Program promotes pesticide use reduction using an array of strategies. The Garden Hotline provides specialized information about integrated pest management (IPM) techniques to residents, businesses and local governments. IPM is also promoted to school districts and other public entities, private landscape businesses, and commercial nurseries.

Program-supported training has been conducted for horticultural students, large landowners, and homeowner associations. Staff from local governments, including King County, the City of Seattle, suburban cities in King County, and government-subsidized housing facilities, rely on the Program's instructional materials and attend training sessions.

Efforts to promote IPM increasingly focus on non-English speaking gardeners and landscapers. In 2008, two trainings in Spanish and one in Vietnamese were held for landscape builders, designers and landscapers.

In addition to promoting safer alternative products, and the proper use and storage of hazardous chemicals, the Program is exploring "upstream" opportunities with product manufacturers, and promoting landscape designs that require fewer chemicals. Finally, Program staff serve as regional experts on natural yard care and pesticide reduction.



Public outreach on natural yard care in Shoreline

7.4.3. High-risk Solvents

Program efforts to reduce the use of, and exposure to, high-risk solvents involve providing technical support and information to the field staff who work directly with businesses using these high-risk solvents, such as dry cleaners.

7.5. Protecting Children and Youth

Two projects, the Young Children's Project and the Healthy Schools Project, focus specifically on reducing the exposure of children and youth to hazardous materials and products.

7.5.1. Young Children's Project

The Young Children's Project works to protect very young children, prenatal to age six, from direct and indirect exposure to hazardous chemicals and products. Children are especially vulnerable to hazardous materials exposures because their bodies are developing. Per pound of body weight, children eat, drink, breathe and metabolize more than adults do. Because they spend more time on the ground and put things in their mouths, children have more contact—and more *direct* contact— with potential sources of toxins.



The Program works to reduce hazardous materials exposures in the places children live, learn and play. It provides outreach to pregnant women, and to the parents and caregivers of infants and young children. Presentations are made to parents groups, and technical assistance visits are made to child care facilities. The Program is involved with the regional Children's Environmental Health Coalition and actively partners with other groups to coordinate messages, share scientific and technical information, and promote better environmental conditions for children. This collaboration involves Program staff, educators, community health practitioners, child care providers, parents, scientists and policy makers.

7.5.2. Healthy Schools Project

The Healthy Schools Project focuses on reducing the exposure of school age children to hazardous materials in public and private school environments. The Project addresses high priority chemicals, such as lead and mercury; art supplies containing heavy metals, acids, and solvents; and laboratory chemicals that are poisonous, corrosive, flammable, explosive, oxidizers, carcinogenic, mutagenic, teratogenic or are neurotoxins. Pesticides are also a focus of the Project and can be present in school buildings and on landscaping and playfields.

The Healthy Schools project works with school district administrators, principles and teachers to develop policies and procedures related to hazardous materials, and it provides lesson plans and resources to help school staff use less hazardous material in the classroom. For example, the Project helps teachers conduct microchemistry science experiments that require fewer laboratory chemicals.

The Project also maintains a Schools Chemical Database that rates the educational utility and hazardous properties of 980 chemicals. The on-line tool proposes restrictions on chemical purchases, storage and use for various grade levels. These restrictions have been incorporated into the Washington State Department of Health's K-12 Health and Safety Guide. The Healthy Schools Project also provides teacher training on the environmental and health risks associated with household hazardous products, and provides student lessons on request.



Toxic glazes from a local school

7.6. Protecting Historically Underserved Populations

Recognizing the need to address historically underserved populations, the Program incorporates the principle of equity of service into all aspects of planning, communication and service delivery. Several projects address this goal.

7.6.1. Environmental Justice Network in Action

The Environmental Justice Network in Action (EJNA) works directly with eight community-based organizations representing minority cultural groups or peoples using English as a second language. EJNA provides outreach and training, distributes Green Home Kits, and participates in community cultural events. EJNA staff assist the Program in developing the tools and capability to work effectively with the many cultural groups in King County, including help with coordinating translations of program documents.

7.6.2. Local Government Housing Authorities Project

The Local Government Housing Authorities Project works with the managers of government-subsidized housing facilities in King County to reduce the exposure of low-income residents to hazardous materials such as pesticides, mercury and lead. A current priority is improving IPM practices at housing authority-operated properties by promoting the proper use of pesticides and accurate record keeping.

7.6.3. Nail Salon Project

Many of the nail salons in King County are owned or operated by women whose first language is Vietnamese. Through technical assistance visits to salons, the Nail Salon Project aims to reduce employees' exposure to hazardous materials and to make sure that these materials are safely used and stored. A Vietnamese-speaking member of the project team plays a vital communications role. The

Project provides bi-lingual training and materials that promote non-toluene, non-formaldehyde, and non-phthalate based polishes. The main areas of focus are the proper storage of acetone-saturated cotton balls; and the purchase and use of safety gloves, glasses, masks, fans, metal storage cans and other safety equipment. A number of other groups and agencies collaborate on this issue, including the Washington State Department of Licensing Cosmetology Board, the Department of Labor and Industries, Vietnamese community groups, and government staff in California and New York, who are developing similar projects.



7.6.4. Select Business Outreach Project

The Select Business Outreach Project also targets workers who are immigrants, who use English as a second language, and others that have been historically underserved. It currently provides outreach to Spanish-speaking janitorial workers, and to landscape workers from many cultures. Spanish speakers make up the majority of janitorial workers. The Project provides culturally relevant information about chemical hazards in the work place and best management practices when using hazardous materials. The Project researches the most common cleaning products and less toxic alternatives to those products, and works with company owners and employees to promote the purchase of these less toxic products. New Futures, a Hispanic group in Burien, has worked with the Project on two “Cleaning with Caution” workshops, and additional workshops are planned. Casa Latina, another Latino group, has also offered workshops for Spanish-speaking janitorial workers.

The landscape services portion of the Project addresses the needs of the Latino, Vietnamese, Cambodian, Khmer, and other Southeast Asian men who constitute the majority of landscape workers. While the transitory nature of landscape businesses—and their workers—has made it difficult to develop lasting contacts, the Project continues to explore opportunities to build trust with landscape businesses and workers.

7.7. Protecting Environmentally Sensitive Areas

The Environmental Quality Team (EQT) helps cities, residents and businesses reduce their use of hazardous materials, and helps ensure the proper management and disposal of these materials when they are used. EQT provides technical assistance upon request. The team also works proactively to protect three environmentally sensitive areas, including flood hazard zones, areas served by on-site

sewage systems, and designated wellhead and groundwater protection areas. They do this by working with the staff of cities on source control, working directly with businesses and schools, and assisting businesses with emergency planning and preparedness.

7.8. Future Direction

The Program will continue to focus on reducing the use of hazardous products and materials.

When these materials are used, they must be managed and disposed properly. While addressing all aspects of this problem, the Program will give special attention to those who are most vulnerable and have been underserved historically. In the future, the Program will continue to identify those who lack services and will strive to provide them with general services, focusing particularly on issues that are within the Program's purview and of most interest to those being served.

