

## Hazardous Materials

### Drafting group

- David Aldape, Brown Enterprises
- Karen Barnett Strandoo, San Francisco Hazardous Waste Management Program
- Amy Brownell, San Francisco Department of Public Health
- Wendy Brummer-Kocks, Southeast Alliance for Environmental Justice
- Jon Dougal, Chamber of Commerce, Environmental Committee
- Kirby Dugger, Snappy Lube, Inc.
- Richard Baker, Peninou French Laundry & Cleaners
- Ben Gale, San Francisco Department of Public Health, Bureau of Environmental Health Management
- Catania Galvan, Community Environmental Relations
- Neil Gendel, Consumer Action's Lead Poisoning Prevention Project
- Paul Hazell, San Francisco League of Urban Gardeners
- Kathryn Hyde, San Francisco resident
- Maggie Johnson [Co-Coordinator and Co-Recorder], San Francisco resident
- John Katz, US Environmental Protection Agency - Region IX
- Bill Kissinger [Co-Coordinator], Commission on San Francisco's Environment
- Jack McKenzie, Pacific Gas & Electric
- Steve Medbery, San Francisco Department of Public Works, Bureau of Environmental Regulation & Management
- Steve Mullinnix, Department of Public Works, Bureau of Construction Management
- Carol Northrup [Facilitator]
- Eric Rubin, Franklin Environmental Products
- Carole Ruwart, Department of Public Works, Bureau of Construction Management
- Milt Seropan, SF Automotive Service Council
- Ara Tahmassian, University of California at San Francisco, Office of Environmental Health & Safety
- Hannah Ware [Co-Recorder]
- Mark Zemelman, San Francisco resident and environmental lawyer

### Introduction

There are currently more than 50,000 different chemicals in common use in the United States. Roughly 1,000 others are added each year. The presence of this enormous variety of hazardous materials in everyday life is a new phenomenon which began only 50 years ago following the technical developments of World War II. Familiar hazardous materials include gasoline, household and industrial cleaners, disinfectants such as pool chlorine, and home and garden pesticides. Hazardous materials fall into one of four categories: products which burn ("ignitable"); products which immediately damage living tissue ("corrosive"); products which can release great energy when combined with water, air or other products ("reactive"); and products which can cause other immediate or long-term health problems ("toxic"). Hazardous wastes are unusable or unwanted hazardous materials. Contaminated soil and other materials from cleanup of contaminated sites may also be considered hazardous waste.

Human exposure to once-common hazardous materials such as lead in paint and asbestos in construction fireproofing is now known to be directly linked to poor health and early death. Hazardous material contamination of housing is a significant problem which affects children and other specific population groups. Many other common practices from the past and present continue to have both known and unknown effects on human health and the environment. In addition, San Francisco has numerous abandoned or underutilized properties in both industrial and residential areas, which have not been redeveloped due to concerns about the perceived cost of environmental clean-up. These properties, recently named "brownfields," are common in older urban areas. The cleanup and restoration of contaminated "brownfield" sites will enable new economic development at the same time that exposure to hazardous materials from these sites is eliminated.

Exposure to hazardous materials is not a risk that occurs in a social vacuum. Many of the items in the following matrix reflect a recognition of the need to prioritize individual, commercial, and governmental activities to achieve the greatest overall reduction of risk. This necessity is based on a realistic view of financial and other resources as well as the variety and relative severity of dangers associated with the past and present use, storage, and disposal of different hazardous materials. In addition, resources dedicated to hazardous material issues must be prioritized along with other risks to the environment, such as vehicle-related air pollution. Finally, risk from hazardous material use must be balanced with other risks to public health and welfare. For example, are limited resources best spent on contaminated-site cleanup or on increasing pre-natal care?

Fundamental to San Francisco's goal of achieving a sustainable society is the need to ensure that all San Francisco's communities and segments of population equitably bear the impact of past, present, and future hazardous materials use. Although achieving a sustainable community in which the negative effects of hazardous materials are eliminated is the goal, the distance yet to be traveled is great. Past management practices for hazardous material and waste have resulted in disproportionate negative effects on communities of low income and communities of color. Members of all communities in San Francisco must be able to share in making decisions regarding the use, storage, cleanup, and disposal of hazardous materials. Success in obtaining representation from all segments of San Francisco's population depends on investing resources to allow people to participate.

Since the early 1970s, strict federal and state regulations have made it increasingly difficult for commercial and industrial concerns to reduce their costs by disposing of hazardous wastes directly to the environment and at the expense of future generations. Regulation has caused many businesses to reduce and in some cases eliminate their use of hazardous materials and their generation of hazardous waste. San Francisco has made strides in educating individuals about household toxics and alternatives and has provided residents and small businesses with reliable, if limited, access to proper disposal. At the same time, toxic and other hazardous materials continue to be produced and purchased in enormous quantities. Many find their way into consumer products which crowd most people's household cabinets and garages. Their use may contaminate air, land, water, and the bodies of people, plants and animals. Achieving a sustainable society will require a vast reduction of the use of chemicals, as society and nature heal from the damage they have already sustained.

### Sustainability Strategy

GOALS	LONG-TERM OBJECTIVES TO REACH SUSTAINABILITY	OBJECTIVES FOR THE YEAR 2001 (5-year plan)	ACTIONS
<p>1. To minimize risks to human health and the environment by striving to eliminate hazardous materials and hazardous waste.</p> <p>2. To prioritize hazardous material and hazardous waste minimization and remediation efforts toward those issues with the highest risk of danger to human and environmental health.</p> <p>3. To ensure that the impact of hazardous</p>	<p>A. Housing and workplaces are designed and maintained to eliminate health hazards to occupants.</p> <p>B. The amount of hazardous material sold, used and stored in San Francisco has been reduced by no less than 75%.</p> <p>C. The use and storage of acutely/extremely hazardous materials has been banned, with an exception for the use of those which provide a net benefit</p>	<p>1. The total amount of hazardous materials stored in San Francisco has been reduced by 10% from 1995 levels.</p> <p>2. The number of options available to residents and businesses for the proper disposal of hazardous wastes is double the 1995 number.</p> <p>3. The City applies the priorities set forth by the Task Force described in Action (g). to 75% of its own</p>	<p>a. Create financial incentives for businesses and city departments to reduce their use and storage of hazardous materials and their generation of hazardous waste.</p> <p>b. Establish the following programs to manage and dispose of hazardous waste generated by residents and small businesses:</p> <ul style="list-style-type: none"> <li>• Curbside collection of oil, paint and batteries.</li> <li>• Satellite collection points.</li> <li>• Mobile collection service.</li> <li>• Additional one dayi collection events.</li> </ul> <p>c. Require every retail outlet for hazardous materials in San Francisco</p>

<p>materials and wastes is not felt disproportionately by any one community or segment of population.</p> <p>4. To ensure that all decisions on hazardous material and hazardous waste issues include all communities and segments of the population.</p> <p>5. To educate and inform the entire community, public and private sectors, about hazardous materials.</p>	<p>that supports and sustains the City.</p> <p>D. All previously contaminated sites have been restored to a level of safety appropriate for the desired use.</p> <p>E. Residents and businesses understand and utilize alternatives to hazardous materials in their homes and workplaces.</p> <p>F. A system has been established by which the City's resources are used to address high priority hazardous material and waste problems.</p> <p>G. Links between hazardous materials and wastes and their impact on human health and the environment have been identified.</p> <p>H. A wide variety of groups and individuals participate in making decisions on hazardous materials issues.</p> <p>I. An informed public understands:</p> <ul style="list-style-type: none"> <li>• The risks involved with their own use of hazardous materials, and</li> <li>• The risks to the community as a whole</li> </ul>	<p>operations (such as city labs, hospitals, and offices).</p> <p>4. A process has been established through which the public sets its priorities for elimination or reduction of hazardous materials and the cleanup of contaminated sites.</p> <p>5. A system has been established for ongoing review of city regulations to insure they are addressing top priorities.</p> <p>6. A standardized self-audit procedure has been established which is mandatory for businesses required to register hazardous material storage with the City and voluntary for residents and other businesses. The purpose of the audit is to provide the tools to assess the impact of operations and lifestyles on the environment, as well as to evaluate compliance with applicable regulations.</p> <p>7. An environmental safety program has been created that is focused on educating groups identified as more at-risk either because of their characteristics (for instance, children</p>	<p>to actively provide public information about non-toxic alternatives and proper disposal of hazardous products.</p> <p>d. Encourage retailers to stock non-toxic alternatives to hazardous products.</p> <p>e. Determine and assess the impact of known hazardous materials exposure within the San Francisco population using existing data.</p> <p>f. Create a central database and mapping system identifying sites which use, store, or are contaminated by hazardous materials.</p> <p>g. Develop a hazardous material prioritization task force, made up of San Francisco residents, representatives of city government, and businesses, to:</p> <ul style="list-style-type: none"> <li>• Define the risks posed by the past and present use of hazardous materials,</li> <li>• Determine the populations most at risk of health damage due to acute and chronic exposure to hazardous materials within San Francisco.</li> <li>• Establish or select a single hazard index that measures the relationship between hazardous materials and their impact on human health.</li> <li>• Set priorities for the elimination of hazardous materials/wastes and remediation of contaminated sites: <ul style="list-style-type: none"> <li>○ Among hazardous material/waste issues and risks, and</li> <li>○ With other health and welfare issues, and</li> <li>○ Disseminate results.</li> </ul> </li> </ul> <p>h. Increase health care and epidemiological studies in areas disproportionately "unhealthy,"</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>due to the environmental impact of the past and present use of hazardous materials.</p>	<p>and people with suppressed immune systems) or their location (for instance, adjacent to a contaminated site).</p>	<p>focusing on sites with a high hazard index.</p> <p>i. Develop criteria in the City's facility-siting policy and permit-review processes to take into account any disproportionate hazardous material/waste exposure "load" on the community.</p> <p>j. Prepare and make available to the public a document describing the current hazardous materials/ wastes siting, zoning, and enforcement decision-making processes and the institutions involved.</p> <p>k. Conduct an inventory and preliminary risk evaluation of all "brownfields" (sites unused due to existing or perceived contamination) within city limits.</p> <p>l. Require retailers and suppliers of appropriate hazardous materials to report annual sales of those materials within San Francisco in order to determine the effectiveness of hazardous material-reduction efforts.</p> <p>m. Develop an outreach program on alternatives to the use of hazardous materials in homes and businesses. The program should include documents in non-technical language, appropriately translated, or use symbols. Work with organizations that already provide education to target groups. Target the program to:</p> <ul style="list-style-type: none"> <li>• Neighborhood associations,</li> <li>• Student-body councils,</li> <li>• Merchant associations, and</li> <li>• San Francisco neighborhood emergency response team participants.</li> </ul> <p>n. Increase education about hazardous materials at workplaces where workers are likely to have less information (such as businesses that are exempt from Cal OSHA hazard communication requirements).</p> <p>o. Develop a system for the public to easily identify neighborhoods and businesses that are environmentally progressive and those that are not.</p>
--	--------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p>Possible examples include:</p> <ul style="list-style-type: none"> <li>• A color-coded report card rating scheme relative to the use or sale of appropriate alternatives to hazardous materials, and</li> <li>• Signs or tags that give recognition to areas (streets, apartment complexes, business parks) that meet environmental criteria.</li> </ul> <p>p. Encourage local news media to designate an editor or reporter who specializes in hazardous materials.</p> <p>q. Develop a public education program that keeps San Francisco residents regularly informed on progress toward the objectives and actions set forth in the sustainability plan.</p> <p>r. Make as part of the City's contracting process the requirement that all prime- and sub-contractors properly dispose of all wastes and reduce or eliminate the use of hazardous materials to the maximum extent possible.</p> <p>s. Create and operate a central phone number which residents could call to report illegal disposal in San Francisco. Stencil this number on sewer catch-basins using alternative community service labor. Educate city enforcement staff (such as police and fire personnel) about the number to develop a consistent and effective response to complaints.</p>
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------