

**Town of
Los Altos Hills**

Household
Hazardous
Waste
Element

Final
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HOUSEHOLD HAZARDOUS WASTE COMPONENT

INTRODUCTION

OVERVIEW OF HOUSEHOLD HAZARDOUS WASTE PROBLEM

Hazardous substances are prevalent in modern society, not only in the commercial and industrial sectors, but in the residential sector as well. Hazardous substances exist throughout the home, garage, garden, and hobby shop as constituents in such products as cleaners, paints, pesticides and glue. Once these products are no longer needed by the consumer, the unused portion is considered household hazardous waste (HHW). Improper disposal of HHW can pose a risk to human health and the environment, and HHW must be handled with care.

A substance is classified as a hazardous waste by the Department of Health Services (DHS), California Code of Regulations (CCR) Title 22, if it demonstrates one of the following characteristics:

- *ignitability* - flammable (e.g., lighter fluid, spot and paint removers);
- *corrosivity* - eats away materials and can destroy human and animal tissue by chemical action (e.g., oven and toilet bowl cleaners);
- *reactivity* - creates an explosion or produces deadly vapors (e.g., bleach mixed with ammonia-based cleaners); and
- *toxicity* - capable of producing injury, illness, or damage to humans, domestic livestock, or wildlife through ingestion, inhalation, or absorption through any body surface (rat poison, cleaning fluids, pesticides, bleach).

Until the early 1980's, city- and county-sponsored programs to properly manage HHW were virtually non-existent, thereby resulting in wastes being disposed in the garbage, down the sewer, into storm drains, or directly onto the ground. The improper disposal of hazardous wastes can result in contamination of ground and surface water and potentially hazardous leachate migration from solid waste landfills.

In response to the growing public awareness of the HHW issue, in 1988, the Town of Los Altos Hills began offering one-day collection programs for these wastes. Collection events held in neighboring communities have been open to Town residents three times a year since the implementation of the program.

The Town is currently participating in the development and implementation of a new, countywide pilot HHW management effort aimed at providing ongoing, convenient and cost-effective collection services and public education for all residents.

THE HHW ELEMENT

HOUSEHOLD HAZARDOUS WASTE ELEMENT REQUIREMENTS

Assembly Bill 2707 requires that each city and the County for the unincorporated area characterize and quantify its HHW stream and develop plans for safe collection, recycling, treatment, and disposal of hazardous wastes generated by its households. An AB 2707 Household Hazardous Waste Element must be submitted to the County by each city and the County for the unincorporated area by July 1, 1991.

The Town of Los Altos Hills has consistently worked with the County of Santa Clara in dealing with HHW, and plans to do so in the future. The Santa Clara County Solid Waste Program staff anticipates that it will submit the city and unincorporated area HHW Elements to the California Integrated Waste Management Board (CIWMB) in 1994. The ideas delineated in the County HHW Element will be very similar to those presented in the plan for Los Altos Hills.

The Household Hazardous Waste Element should clearly delineate the specific alternatives, tasks, program selections and responsibilities of the Town.

In Santa Clara County, a number of cities and the County for the unincorporated area have already agreed upon HHW management goals and have developed plans for a pilot multi-jurisdictional HHW collection and source reduction system.

HHW PLANNING EFFORTS IN SANTA CLARA COUNTY

Background

With nearly 1.5 million residents, Santa Clara County ranks first in the Bay Area and fourth in the State in terms of population according to the Association of Bay Area Governments. The Town of Los Altos Hills is located in the South San Francisco Bay Area and has an approximate population of 7,764 residents. The County covers 1320 square miles, making it the second largest county in the San Francisco Bay Area. It is a diverse county encompassing both highly urbanized and rural-agricultural areas. The County has experienced rapid population growth since the 1950's, with corresponding growth in solid waste and household hazardous waste generation.

Located at the southern end of the San Francisco Bay, Santa Clara County has a number of landfills located in close proximity to the Bay and wetland ecosystems. This, coupled with the fact that groundwater supplies 50 percent of the drinking water in Santa Clara County, requires that special measures be taken to protect the environment and groundwater by keeping hazardous waste out of landfills.

Household hazardous waste is generated in almost all homes, and until recently, residents have not had access to proper disposal options for this waste on an ongoing basis. As a result, HHW may be improperly disposed in sanitary landfills.

Santa Clara County cities have been in the forefront in California and the nation in developing HHW management programs. Cities have sponsored one-or two day HHW collection events and have set up curbside motor oil collection programs for their residents. Some cities sponsor additional HHW disposal programs at their drop-off recycling centers. Cities and non-profit organizations have developed and distributed educational materials that alert residents to the proper disposal methods for HHW and suggest alternatives to household products that generate hazardous waste.

The County has co-sponsored collection events for the unincorporated area with neighboring cities. Reciprocal agreements that allow participation in another jurisdiction's event have been utilized by Los Altos Hills.

The success of past HHW programs has resulted in an increasing demand for services. However, because of the limited number of one- or two-day HHW events available, the hazardous waste disposal needs of some town residents have not been fully met. This is an acute problem for those with immediate disposal needs, such as residents who are moving.

This increasing demand, together with raising costs of HHW collection and disposal, has led a number of local jurisdictions to the conclusion that one- or two-day collection events alone do not offer a viable solution for meeting future needs. Additionally, there has been a recognition that the problems associated with improper disposal of HHW are a regional issue and may require regional solutions.

The Household Hazardous Waste Working Group of the Santa Clara County Tanner Advisory Committee developed a set of goals for management of household hazardous waste in the County. The Working Group is composed of household hazardous waste program coordinators from cities; County hazardous waste, solid waste, and environmental health staff; private and solid waste contractors; and community advisory members. The Working Group developed the following HHW goals for the incorporated and unincorporated areas of Santa Clara County.

Tanner Plan Household Hazardous Waste Goals

- Keep household hazardous waste out of landfills; sanitary and storm sewers; and waterways
- Reduce potential adverse effects of household hazardous waste on public health and safety
- Prevent harmful exposures in the home and environment through coordinated public education
- Provide services to all residents

The Working Group determined that while most jurisdictions hold one-day collection events, a number of unmet needs remain in the county.

Unmet Needs

- Access to household hazardous waste collection on an "immediate need" basis (residents who are moving or otherwise need to dispose of materials rapidly)
- Access to ongoing collection centers
- Public education materials and programs that are consistent for all jurisdictions in the county

These conclusions are echoed in the County's Hazardous Waste Management Plan (Tanner Plan) of 1989 which states: "The County and cities shall coordinate the development of a program for the proper management and disposal of household hazardous waste on a county-wide basis in accordance with the waste management hierarchy and considering existing programs and conditions."

Under direction of staff to the Tanner Committee, a HHW Working Group began a planning effort to examine alternative program models and determine equitable and efficient methods of countywide service delivery. During the planning process, the group concluded that a countywide program might be more cost effective and provide greater access to service for county residents.

COUNTYWIDE HHW COLLECTION SYSTEM

The Working Group recommended implementation of a mobile collection unit, with a permanent HHW facility or facilities to be added in the near future. The mobile unit is located at neighborhood collection sites identified by the Town HHW coordinators and the County for the unincorporated area and moves to new locations throughout the county on a rotational basis. Residents of any participating jurisdiction are eligible to use the mobile program on an appointment-only basis at any of its scheduled stops throughout the county.

The HHW Program has recently purchased a specially equipped vehicle, a portable chain link fence for security, and canopies to protect workers from the weather. The vehicle contains an electric generator, a water system, as well as emergency and personal protective equipment and a small lab. The vehicle also provides storage space for supplies and equipment needed to conduct the mobile collections.

Planning for a permanent HHW collection site is in the early stages and potential sites are being identified. Additional permanent facilities may be developed in the future. The permanent site will provide additional collection services and support the mobile collection program, by allowing expanded storage capabilities for more efficient consolidation of wastes prior to disposal. This may result in lower per unit disposal costs as well as additional opportunities to separate materials for reuse, treatment, or recycling. The permanent facility could also support a HHW pickup service for elderly and disabled residents.

The County Division of Environmental Health Services serves as the lead agency for the administration and implementation of the countywide HHW Program. Hazardous materials specialists and environmental health specialists have been utilized for development and initial implementation of the collection program. Health Department in-house support services include an industrial hygienist, a toxicologist, and a chemist. A public health laboratory is available as a site where the chemical identification kits can be used for identifying unlabeled wastes. Environmental Health Services staff contract with private companies for lab-packing, transportation, recycling and disposal of the waste.

The Department of Planning and Development serves as the lead agency for public education efforts. Staff coordinates with other city, county and non-profit agencies to maximize use of available resources and avoid duplication in the development of educational materials and programs. Educational projects emphasize source reduction in the use of potentially hazardous products by providing information about less-hazardous alternative materials and techniques, in addition to information about safe disposal practices.

Participants in Pilot Program

Thirteen jurisdictions participated in the 1991-92 pilot countywide HHW program and have participated in the 1992-93 program year. Participating jurisdictions are listed below.

City of Campbell	City of Cupertino
City of Los Altos	Town of Los Altos Hills
Town of Los Gatos	City of Milpitas
City of Monte Sereno	City of Mountain View
City of San Jose	City of Santa Clara

City of Saratoga
County for the Unincorporated Area

City of Sunnyvale

The countywide pilot HHW Program, hereafter referred to as "Countywide HHW Program," began collection in the fall of 1991. Some participating cities relied entirely upon the Countywide HHW Program for management of HHW. Other cities used the Countywide HHW Program to augment existing HHW programs such as periodic drop-off events. The program serves the unincorporated areas of Santa Clara County.

While the Countywide HHW Program operated as a pilot project in its first year, it is anticipated that it will continue through the short-term (1991-1995) and medium-term (1996-2000) planning periods. At the end of the first year of operation, the program was evaluated by the County and the participating cities. The cities decided the extent to which they would continue their participation in the Countywide HHW program. Cities not currently participating in the program have the option of participation in future years.

HOUSEHOLD HAZARDOUS WASTE ELEMENT FOR THE TOWN OF LOS ALTOS HILLS

CHAPTER 1

GOALS

Improper disposal of household hazardous waste will be reduced or eliminated in the Town of Los Altos Hills in the short term and medium term planning periods. Generation of household hazardous waste will be reduced through source reduction efforts. Household hazardous waste generated by residents will be safely collected, recycled, treated or disposed.

1.1 OBJECTIVES FOR SHORT-TERM PLANNING PERIOD (1991-1995)

OBJECTIVE #1: PROVIDE THE RESIDENTS OF LOS ALTOS HILLS ACCESS TO CONVENIENT HOUSEHOLD HAZARDOUS WASTE COLLECTION SERVICES

Mobile Collection Unit

The Town of Los Altos Hills plans to participate in the Countywide HHW Program which will provide the residents with year round collection services. The mobile unit will operate in close proximity of most Town residents one to two times per year. In addition, residents in need of immediate disposal services can deliver their HHW, by appointment, to the mobile collection unit at any location in the county.

Telephone Appointment and Information Telephone Service

The Countywide HHW Program will initially operate on an appointment-only basis. The County Division of Environmental Health Services will operate the telephone appointment and information line for the mobile collection unit and the permanent HHW facility.

Permanent Facility

The Town of Los Altos Hills intends to participate in the Countywide HHW Program plan to develop and operate a permanent HHW collection facility in addition to the mobile collection unit.

Periodic Drop-off Days

The Town of Los Altos Hills intends to continue to participate in HHW Drop-off Days during which residents may take HHW without an appointment.

OBJECTIVE #2: MINIMIZE DISPOSAL OF COLLECTED HHW THROUGH REDISTRIBUTION OF REUSABLE MATERIALS AND HHW RECYCLING

Distribution to Agencies and Municipal Departments

When practical, usable materials such as paint and automotive maintenance products will be offered to non-profit agencies, and city and county departments.

Distribution at Collection Events

When practical, reuse tables will be operated at HHW collections events to allow residents to select usable products.

Recycling

To the maximum extent possible, HHW such as paint, motor oil, and automotive batteries will be separated from incoming waste and sent away for recycling.

OBJECTIVE #3: IMPROVE MONITORING AND EVALUATION OF HHW PROGRAMS

The Town of Los Altos Hills intends to participate in the development of county-wide standardized methods for measuring collected HHW.

OBJECTIVE #4: LIMIT IMPROPER DISPOSAL OF HAZARDOUS WASTE AT SOLID WASTE LANDFILLS BY CONTINUING STATE-MANDATED HAZARDOUS WASTE EXCLUSION PROGRAMS

Load Checking, Sign Posting, Training, and Customer Notification

Incoming solid waste at Newby Island and Zanker Road landfills, which serve the Town of Los Altos Hills, will be monitored by load checking programs under the oversight of County Environmental Health, the local enforcement agency, as required by the Regional Water Quality Control Board. Landfill operators will carry out required sign posting, employee training and customer notification regarding the prohibition of HHW from landfill disposal.

OBJECTIVE #5: INCREASE EFFICIENCY AND EFFECTIVENESS OF HHW COLLECTION SERVICES AND PUBLIC EDUCATION BY COORDINATING PROGRAMS WITH OTHER JURISDICTIONS AND AGENCIES WHENEVER FEASIBLE

HHW Management in Santa Clara County

The Cities of Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Sunnyvale, San Jose, Santa Clara, Saratoga; the Towns of Los Altos Hills and Los Gatos; and the County for the Unincorporated area; County Hazardous Waste Management Program; County Environmental Health Services; County Solid Waste Program intend to participate in cooperative HHW management efforts. The Nonpoint Source Pollution Control Program; the wastewater treatment plants; community advisory persons; schools, and non-profit organizations will be included in this multi-jurisdictional effort.

OBJECTIVE #6: DECREASE POTENTIAL SHORT- AND LONG-TERM LIABILITY RISKS BY MONITORING ENVIRONMENTAL COMPLIANCE RECORDS AND PROOF OF INSURANCE OF CONTRACT WASTE HAULERS AND CONTRACT TREATMENT, STORAGE AND DISPOSAL FACILITIES

Environmental Compliance

The past three years' environmental compliance records of all hazardous waste contractors will be examined by the County's Department of Environmental Health Services.

On-Site Audits

Audits of facilities under consideration will be conducted by the County's Environmental Health Services to confirm safe waste management methods

Liability Insurance

Proof of adequate liability insurance will be required and be kept on file.

OBJECTIVE #7: INCREASE SOURCE REDUCTION OPTIONS FOR RESIDENTS BY SUPPORTING LEGISLATIVE EFFORTS AIMED AT PROMOTING DEVELOPMENT OF SAFER PRODUCTS AND SAFER HHW MANAGEMENT METHODS

Legislative Efforts

The Town will initiate, endorse, support efforts to require manufacturers to market less hazardous or non-hazardous products. Increased recycling options for household hazardous wastes may also be encouraged through the support of legislation.

1.2 OBJECTIVES FOR MEDIUM-TERM PLANNING PERIOD (1996-2000)

Landfill disposal of household hazardous waste will be further reduced or eliminated in the Town of Los Altos Hills in the medium-term planning period (1996-2000) by achievement of the following objectives:

OBJECTIVE #1: CONTINUE THE OBJECTIVES DEVELOPED FOR THE SHORT-TERM PLANNING PERIOD INTO THE MEDIUM-TERM PLANNING PERIOD

OBJECTIVE #2: INCREASE SOURCE REDUCTION EFFORTS

1.3 TARGETED AND EXCLUDED MATERIALS

Household materials that have the characteristics of hazardous waste, as defined by Section 25117 of the Health and Safety Code, have been targeted for collection by the Town of Los Altos Hills. See Attachment 1 for Section 25117 of the Health and Safety Code.

Several types of materials are excluded from HHW collection programs due to potential hazards to the public and collection program staff. Ammunition and explosives will not be accepted. Residents who request disposal services for ammunition or explosives will be referred to the police or fire department. Compressed gas cylinders, i.e., propane tanks, over 20 pounds, will not be accepted. Residents will be referred to dealers for disposal of gas cylinders.

Medical wastes will not be accepted. Residents requesting disposal services for medical wastes will be advised of proper disposal methods for specific types of waste materials. Radioactive waste will not be accepted. Smoke alarms, the common household product containing radioactive materials, is considered "Below Regulatory Concern" and may be discarded with household solid waste.

CHAPTER 2

EXISTING HHW CONDITIONS

2.1 QUANTITY OF HOUSEHOLD HAZARDOUS WASTE GENERATED BY THE TOWN OF LOS ALTOS HILLS

The 1991 waste characterization study done at Zanker Road Resource Facility indicates that an approximate 8,679 tons of solid waste are generated by the Town of Los Altos Hills annually. Of the Town's landfill waste stream, 0.023% was identified as HHW. Therefore, approximately 2.0 tons of HHW are being improperly disposed in the landfill annually by Town residents.

In 1990, 2.0 tons of HHW was collected by city-sponsored HHW collection programs. This figure was derived by converting amount of gallons collected to pounds and tons.

It can therefore be estimated that 4.0 tons of HHW was generated in the Town in 1990, of which 2.0 tons were improperly disposed and 2.0 tons of waste were disposed of properly. Table 2.1 below summarizes HHW disposed in the Town of Los Altos Hills.

Table 2.1

Total Tons in Waste Stream (annually)	8,679
Percentage of HHW in Waste Stream	0.023%
Tons HHW in Waste Stream	4.0
Tons HHW Diverted	2.0
Amount of HHW Discovered in Landfill Load Checking Program	2.0
Number of Households in 1990.	2,723
Estimated HHW Disposed per Household (pounds)	4.0

2.2 TYPES AND AMOUNTS OF HHW DIVERTED

The types of HHW and amounts collected by city-sponsored collection events and programs in the Town of Los Altos Hills in 1990 are shown on the CIWMB Form 303 "Household Hazardous Waste Collection Information" included as Attachment 2.

2.3 EXISTING SOURCE REDUCTION, COLLECTION, RECYCLING, TREATMENT AND DISPOSAL PROGRAMS

Between 1988 and 1990, several types of household hazardous waste collection and recycling programs were developed and implemented in the Town of Los Altos Hills. By 1990, the Town sponsored the following programs.

1. Periodic Drop-off Events
2. Hazardous Waste Exclusion Program
3. Exclusion Measures Taken by Waste Hauler

Since the fall of 1991, the Town of Los Altos Hills has been a participant in a countywide pilot HHW program. The pilot program involves a mobile collection unit that rotates throughout the county on a monthly basis. A total of 4,000 pounds of HHW is anticipated to be recycled or disposed through the existing and proposed programs for the 1991 fiscal year for the Town of Los Altos Hills.

1. Periodic Drop-off Events

The Town of Los Altos Hills has sponsored 3 HHW periodic drop-off events each year between 1988 and 1990. In 1990, an average of 35 residents participated in each event, bringing an average load of 40 pounds of HHW. In all, approximately 2 tons of HHW were collected from Los Altos Hills residents.

2. Hazardous Waste Exclusion Program

The objective of the Hazardous Waste Exclusion Program is to discourage the improper disposal of hazardous waste at the solid waste disposal facility. Solid waste generated in the Town of Los Altos Hills is landfilled at Newby Island and Zanker Road landfills. All landfills are required to implement hazardous waste exclusion programs. The Hazardous Waste Exclusion Program consists of the following components.

Load Checking at Newby Island and Zanker Road Landfills

Incoming solid waste at landfills will be monitored by load checking programs under the oversight of County Environmental Health (the local enforcement agency) as required by the Regional Water Quality Board. Load checking involves inspection of incoming solid waste, landfill employee training, state and county-mandated hazardous waste handling and reporting procedures. If prohibited waste is identified, the generator is notified and becomes responsible for removing the waste. Violators of the load checking program may be subject to criminal penalties under Title 22.

Landfill Public Awareness Efforts

Landfill public awareness efforts include sign posting at landfill entrances and unloading areas, verbal instructions to residents using landfill, and answering phone inquiries regarding waste disposal.

3. Exclusion Measures Taken by Waste Haulers

Los Altos Garbage Company sends utility bill inserts, posts notices on dumpsters, conducts hazardous materials training, and inspects incoming waste during collection.

2.4 MANAGEMENT OF HHW DIVERTED FROM LANDFILL DISPOSAL IN 1990

The Town of Los Altos Hills ascribes to the disposal hierarchy "Reduce, Reuse, Recycle, Treat, Dispose" for management of collected HHW. The management methods for diverted HHW are included in Attachment 2. A total of 2 tons of HHW were collected, 25% treated, and 75% hazardous waste landfilled in 1990. A description of the recycling, treatment and disposal methods for HHW is included in Chapter 4, Section 4.9 and Chapter 5, Section 5.5. and on CIWMB Form 303 which is included in Form 303, included as Attachment 2.

2.5 FUTURE STATUS OF EXISTING PROGRAMS

The Town of Los Altos Hills plans to continue to participate in the county run mobile collection program, as well as in the development and use of a permanent collection facility.

During the first year of operation, the mobile collection unit did not operate in the Town of Los Altos Hills, but was located close enough for Los Altos Hills residents to use on several occasions. The Town of Los Altos Hills budgeted \$15,000 on HHW for services during the first 12 months of the program. Approximately \$10,000 was directed toward the use of the HHW facilities by 100-150 residents. The Town will determine future levels of service and financial commitment to the Countywide HHW Program on an annual basis in the short- and medium-term planning periods.

HHW waste exchange activities and Town-sponsored public education activities will be incorporated into the Countywide HHW Program. Other regional public education efforts (Nonpoint Source Program, Non-profits, etc.) are expected to continue into the short- and medium-term planning periods. The hazardous waste exclusion activities at the landfill(s) are expected to continue into the short- and medium-term planning periods.

CHAPTER 3

METHODOLOGY FOR EVALUATION OF HHW MANAGEMENT ALTERNATIVES

The following evaluation methodology was developed by EMCON Associates for defining the best HHW management program. Additional criteria; "Availability of Service" and "Provides Immediate Disposal Services"; were added to reflect needs of other Santa Clara County communities. The evaluation criteria is consistent with the evaluation procedure outlined in Integrated Waste Management Board's Draft Planning Guidelines for Source Reduction and Recycling Elements.

3.1 EVALUATION CRITERIA

The following twelve criteria have been rated using scale of high, medium, and low, with high being positive. Ten alternatives for managing HHW were evaluated. The evaluation was summarized in Table 4.1 which is located in the following chapter of this document.

3.1.1 Waste Diversion Potential

Waste diversion potential is the estimated ability of the alternative to reduce the amount of HHW improperly disposed in the landfill. Waste diversion potential measures the alternative's ability to accept, handle, recycle or properly dispose of HHW.

- Low: The alternative has low potential to divert HHW.
- Medium: The alternative is likely to divert some HHW.
- High: The alternative is likely to divert large amounts of HHW.

3.1.2 Absence of Hazard

Absence of hazard reflects the extent to which hazards result from the alternative. Hazards could include health risks, injury, fire, or other.

- Low: Potential hazards are not completely understood, or the alternative presents potential hazards.
- Medium: Potential hazards are known and controllable. Some impacts remain.
- High: There are few or no potential hazards or unmitigated impacts.

3.1.3 Flexibility

Flexibility measures the adaptability to changing economic, technological, and social conditions.

- Low: The alternative is limited in adaptability to changing conditions.
- Medium: The alternative is anticipated to have a moderate adaptability to changing conditions.
- High: The alternative can be readily adapted to meet changing conditions.

3.1.4 Availability of Service (Nearby and Frequent Services)

Availability of service is a consideration of travel distance for participants and frequency of service. Optimal travel distance was determined to be no more than a 20 minute commute from residents' homes. Optimal frequency of service was determined to be at least two disposal opportunities per year within the 20 minute commute distance.

- Low: The alternative does not provide services within a 20 minute commute. Cost or logistical barriers make frequent service with this alternative difficult.
- Medium: The alternative has potential to provide disposal services within a 20 minute commute. The alternative has the potential for frequent service.
- High: The alternative is designed to provide disposal services within a 20 minute commute and frequent service is not hindered by cost or logistical barriers, in comparison with other alternatives.

3.1.5 Provides Immediate Need Disposal Services

Provides immediate need disposal service refers to the alternatives ability to provide disposal services within several days of a request. Residents who are moving often request HHW disposal services. If disposal services are not available, these residents may improperly dispose of their stored HHW.

- Low: The alternative does not accommodate needs of residents requesting immediate disposal services.
- Medium: The alternative may provide some immediate need services.
- High: The alternative has flexibility to accommodate residents requesting immediate disposal of HHW.

3.1.6 Limited Shift in Waste Type Generation

Limited shift in waste type generation measures the alternative's ability to limit consequences of diversion of one material at the expense of increased generation of another material.

- Low: The alternative would significantly shift waste production to generation of non-recyclable, non-marketable, or more hazardous materials.
- Medium: The alternative would result in the creation of little shift toward non-recyclable, non-marketable, or more hazardous wastes.
- High: The alternative would result in no shift toward non-recyclable, non-marketable, or more hazardous wastes.

3.1.7 Ease of Implementation

Ease of implementation measures the speed with which the alternative can be brought into service, i.e., whether it can be implemented in the short-term or medium-term planning periods.

- Low: Implementation of the alternative could not be completed until after 2000.
- Medium: Implementation of the alternative is anticipated to be completed between 1996 and 2000. This is the medium-term planning period
- High: Implementation of the alternative is anticipated to be completed by 1995. This is the short-term planning period.

3.1.8 Facility Need

Facility need measures the need to expand existing facilities or build new facilities to support the implementation of the alternative.

- Low: New facilities must be developed to accommodate the alternative.
- Medium: Existing facilities must be expanded or altered to accommodate the alternative.
- High: The alternative requires no new facilities or modification of facilities.

3.1.9 Consistency with Local Policies

Consistency with local policies measures the alternative's compatibility with existing local plans, policies, and ordinances.

- Low: The alternative would require major changes to existing local plans, policies, or ordinances.
- Medium: The alternative would require minor changes to existing local plans, policies, or ordinances.
- High: There are no existing local plans, policies or ordinances that would impede the implementation of the alternative.

3.1.10 Absence of Institutional Barriers

Absence of institutional barriers evaluates the extent to which institutional barriers, such as long-term franchise agreements or other contracts, or other barriers, may impact local implementation of the alternative.

- Low: The alternative is impacted by existing institutional barriers which are not under the control of the jurisdiction.
- Medium: The alternative is impacted by existing institutional barriers over which the jurisdiction maintains some control.
- High: There are no existing institutional barriers to the alternative.

3.1.11 Estimated Cost

Estimated cost evaluates the projected cost of the alternative, including capital costs and operating costs for the short-term and medium-term planning period.

3.1.12 End Uses (Recyclability and Redistribution Potential)

End uses measures the recycling or reuse potential of collected HHW products.

- Low: Recycling or redistribution activities are incompatible with the alternative.
- Medium: The alternative might allow for recycling/redistribution.
- High: Recycling or redistribution activities are compatible with the alternative.

CHAPTER 4

EVALUATION OF HOUSEHOLD HAZARDOUS WASTE MANAGEMENT ALTERNATIVES

This section presents an evaluation of nine alternatives that were considered by the Town of Los Altos Hills to meet its HHW management objectives, using the criteria described above in Chapter 3. The results of the evaluation are summarized in Table 4.1.

An additional method of HHW management was considered: curbside HHW collection. This method was not included in the "Evaluation of Alternatives" due to unacceptably high potential public health risks. HHW set at the curbside could be blown over or rained upon, resulting in toxic run-off into the storm drain system. Children or pets could tamper with materials left at the curb, and waste haulers could be harmed if residents set out unacceptable types or amounts of wastes.

Curbside HHW collection programs that accept all types of HHW have not been implemented in California. Unlike programs that collect motor oil at the curb, it is not known if permits could be obtained to collect all types of HHW in this manner. The permitting process for curbside HHW collection was not explored as the alternative was deemed unfeasible due to potential health and safety hazards.

4.1 ALTERNATIVE 1: PERIODIC HHW DROP-OFF EVENTS

The Town of Los Altos Hills has sponsored periodic drop-off events since 1988. These events have been scheduled, on the average, three times per year. Events have been held in Cupertino, Mountain View, and Los Altos, and in 1990, an average of 35 residents of Los Altos Hills participated in each event.

WASTE DIVERSION POTENTIAL - Rating High

Periodic events have collected large amounts of HHW.

ABSENCE OF HAZARD - Rating Medium

Potential public health risks and safety hazards associated with any HHW collection method include spills, fires, leaks, or explosions resulting from improper collection, storage, handling, or transport of hazardous material. However, proper design, equipment, and health and safety training minimize potential hazards.

FLEXIBILITY - Rating Medium

Periodic drop-off events have a limited ability to respond to unanticipated conditions, such as an unexpectedly high turn-out. On the other hand, periodic events are flexible in the sense that, if funding permits, a city can decide to hold more frequent events to accommodate high demand in a safer, more orderly manner.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating Medium

Availability of service refers to the alternative's ability to provide HHW disposal services within a 20 minute commute of residents' homes and, optimally, four times per year. These events are

generally held in one centralized location and only one or two times per year. However, additional events and event locations could be added.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating Low

Periodic drop-off events have generally operated one or two days per year, although the possibility exists to hold such events more frequently.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable.

EASE OF IMPLEMENTATION - Rating High

The Town of Los Altos Hills has sponsored periodic drop-off events and is familiar with the planning and implementation procedures.

FACILITY NEEDS - Rating High

Periodic drop-off events do not require expansion or development of facilities.

CONSISTENCY WITH LOCAL POLICIES - Rating Medium

The Town of Los Altos Hills has periodic events over the past three years, indicating that this alternative is consistent with local policies and ordinances. However, the periodic events do not meet the needs of residents requesting immediate disposal services or provide ongoing collection services as recommended in the County Hazardous Waste Management (Tanner) Plan.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

No institutional barriers, such as existing contracts, would impede the Town of Los Altos Hills in implementing periodic drop-off events.

ESTIMATED COST

In calendar year 1990, the Town of Los Altos Hills spent \$10,000 to participate in three HHW collection events. This amount includes the contractor's fee for management of the events and disposal of collected waste. Additional costs for the program are city planning time, advertising, donated equipment, and volunteer labor. Approximately 100 residents were served in 1990.

A preliminary cost analysis of past periodic events throughout the county indicates considerable variation in cost between city events. Factors contributing to the cost variations include amount of volunteer labor and other donated services used to plan and operate the events.

Costs for HHW collection alternatives under consideration (periodic; mobile, five permanent facilities; and combination mobile and one permanent facility) are driven primarily by siting, waste disposal, event staffing, and capital expenditures. It was estimated that the cost per vehicle service at all four of these options would be within the \$90 - \$110 range.

END USES (Recyclability and Redistribution Potential) - Rating Medium

Periodic collection events divert latex paint, oil, and automotive batteries from landfill disposal for recycling. However, lacking storage space and permits to store materials, periodic events are limited in their ability to promote redistribution of usable products.

4.2 ALTERNATIVE 2: FIVE PERMANENT FACILITIES

In this alternative, five permanent HHW collection facilities would be located throughout the county to provide HHW collection services within a 20 minute commute for a majority of residents in participating communities. The program would be administered by the Countywide HHW Program. Each city would determine, on an annual basis, the desired level of HHW services for its residents.

WASTE DIVERSION POTENTIAL - Rating High

Five permanent facilities may process participants more efficiently than collection events because of the presence of more extensive equipment and greater storage capabilities. Permanent facilities can provide comprehensive, ongoing disposal services.

ABSENCE OF HAZARD - Rating High

Permanent facilities can provide a safe means of collecting and properly disposing of HHW. Proper design, equipment, and permanent staff can minimize potential hazards associated with HHW collection.

FLEXIBILITY - Rating High

Permanent facilities do not have the flexibility to operate in various locations as do periodic collection events or a mobile collection unit. However, permanent facilities can accommodate changing social conditions, such as increasing demand for service, by adjusting the days of operation. A permanent facility can also serve as a "hub" for a mobile collection of HHW from elderly and disabled residents.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

This alternative has the potential to provide frequent services, depending on the number of days the facility is open. Residents from any participating community could use the permanent facilities which could be located within 20 minutes of most residents.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating High

The five permanent facilities alternative can provide immediate need for disposal services.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable

EASE OF IMPLEMENTATION - Rating Medium

The implementation phase for permanent facilities requires site selection, environmental review, permitting, Board of Supervisors' approval, and construction. In addition, the siting of permanent facilities may be subject to the Tanner Plan review process. Implementation could extend beyond the short-term planning period (1991-1995).

FACILITY NEEDS - Rating Low

This alternative requires the location or construction of collection and storage facilities. A HHW facility must meet local, state and federal safety and operating standards. A facility should have separate storage bays or bins to prevent spilled or leaked incompatible wastes from mixing. A collection and storage building may need explosion proofing; ground columns; proper containment; and sufficient ventilation. Adequate emergency response and safety equipment would be

necessary. A permanent facility should be situated on an impervious surface and fenced for security. There are complex facility needs for five permanent facilities.

(Note: State regulations for permanent HHW facilities are being developed. It is not possible to describe in further detail the requirements of the permanent facilities until the new state regulations are available.)

CONSISTENCY WITH LOCAL POLICIES - Rating Medium

The five permanent facilities alternative appears to be consistent with the Tanner Plan recommendations to provide ongoing and immediate need disposal services for all residents. However, a land use decision may be required by the local planning commission.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

No contractual or other institutional barriers exist on implementation.

ESTIMATED COST

A preliminary cost analysis for the five permanent facilities indicates that the cost of this alternative is dependent, to a large extent, on two factors; availability of sites and facility design.

If appropriate sites could be located that did not require purchase of land, the cost of this alternative would be significantly lower. It might be possible to site permanent HHW facilities at existing landfills, transfer stations, materials recovery facilities, wastewater treatment plants, or public works facilities. However, if siting permanent facilities requires the purchase of property, or if residents opposed the siting of such facilities, a significant increase in cost would result.

The second factor that would affect the cost is the actual design of the facilities. A range of options exists for structural design and equipment for permanent HHW facilities. These factors would greatly influence cost of implementing the five permanent facilities alternative. The cost estimates used here assume permanent facilities consisting of slightly modified existing structures and/or the use of roll-off bins for waste collection and storage.

It was estimated that it might be possible to implement the five permanent facilities alternative at a cost similar to costs for the other HHW collection alternatives under consideration (periodic; mobile; and combination mobile and one permanent facility). Costs of all options are driven primarily by siting, waste disposal, event staffing, and capital expenditures. It was estimated that the cost per vehicle service at all four of these options would be within the \$90 - \$110 range. However, the unknown factors regarding facility siting and design could significantly change this estimate.

END USES (Recyclability and Redistribution Potential) - Rating High

Valuable materials diverted from the incoming waste stream can be stored at a permanent facility, thereby making waste exchange or organized waste referral services feasible. The presence of permanent, trained staff enhances ability to carry out recycling and redistribution activities.

4.3 ALTERNATIVE 3: MOBILE COLLECTION

A mobile collection program consists of a modified collection vehicle or vehicles which may contain an electric generator, compressor, and water system; a fire response system; emergency equipment; and a lab for identification of unlabeled HHW. A mobile facility can be dismantled in a

short time once a collection event is completed. This alternative assumes no permanent sites would be developed.

WASTE DIVERSION POTENTIAL - Rating High

This is an effective approach for HHW collection in a large geographical area.

ABSENCE OF HAZARD - Rating Medium

The mobile collection alternative involves more transportation of equipment and staff than a permanent facility and therefore, presents a slightly higher risk of hazard. Proper design, equipment, as well as safety training can minimize potential hazard.

FLEXIBILITY - Rating High

A mobile collection unit is highly flexible as both location and frequency of operation can be readily changed to accommodate variations in demand or shifts in population density. However, sufficient advertising must be done to notify the public of the exact location. In addition, finding sites with adequate and safe accessibility might be difficult.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

The mobile unit would be scheduled to operate in approximately 20 locations throughout the county during the first year of operation. Most residents will have a maximum 20 minute drive to the unit. The mobile unit's operating schedule could be modified to include additional collection locations or more frequent service as needed. Additional locations and days of operation may be added annually throughout the short- and medium-term planning period.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating High

The mobile unit would operate at the various locations in the county on a rotational basis. Residents in need of immediate disposal services will be able to deliver their HHW, by appointment, to the mobile unit at its next scheduled day of operation anywhere in the county.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable.

EASE OF IMPLEMENTATION - Rating High

A mobile collection program could be permitted by the Department of Toxic Substances Control under a Variance. The mobile countywide HHW disposal program has been implemented in the short term planning period (before 1995).

The implementation phase for a permanent facility includes site selection, environmental review, permitting, Board of Supervisors' approval, and possibly facility construction or modification of existing structures. "Permit-by-rule" regulations for siting permanent HHW facilities are under development by the California Department of Toxic Substance Control. If a site is chosen before the regulations are in place, a variance would need to be obtained from the Department. In addition, the siting of a permanent facility may be subject to the Tanner Review Process. It appears unlikely that one permanent facility could be operational before the end of the short-term planning period (before 1995).

FACILITY NEEDS - Rating High

The mobile collection unit requires a modified vehicle or vehicles and equipment. However, no purchase of land or construction of facilities is required.

CONSISTENCY WITH LOCAL POLICIES - Rating High

The mobile collection program was determined to be a HHW management technique best able to provide ongoing and immediate need services to residents in a large geographical area. This alternative is expected to require a less complex siting process due the temporary nature of the mobile unit stopovers.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

No regulatory prohibitions or contractual barriers exist.

ESTIMATED COST

A preliminary cost analysis for the mobile HHW collection alternative indicates that this alternative might be implemented at a cost similar to the periodic events alternative, five permanent facilities alternative, and the combination mobile unit plus one permanent site alternative. Costs of all options are driven primarily by siting, waste disposal, event staffing, and capital expenditures. It was estimated that the cost per vehicle service at all four of these options would be within the \$90 - \$110 range.

END USES (Recyclability and Redistribution Potential) - Rating Medium

A mobile collection unit can divert materials for recycling and can include a HHW waste exchange component. However, limited space prevents storage of reusable products for distribution at future events.

4.4 ALTERNATIVE 4: COMBINATION PROGRAM: MOBILE UNIT PLUS PERMANENT FACILITY

The combination program consists of a mobile unit plus one permanent facility. The permanent facility would be located in a densely populated urban area and the mobile unit would operate in the cities and unincorporated area throughout the county on a rotating basis. The number of vehicles served will be adjusted in response to demand for services and availability of funds.

WASTE DIVERSION POTENTIAL - Rating High

The mobile unit plus permanent facility alternative could provide convenient, cost-effective service to both a densely populated area and large geographical region.

ABSENCE OF HAZARD - Rating Medium/High

The mobile unit involves more movement of equipment and materials than the permanent facility. The majority of collected HHW would be removed directly from the mobile unit by licensed waste haulers. To minimize waste disposal costs, partially-filled lab packed drums might be delivered to the permanent facility to await additional waste. Proper equipment, training, and operating procedures would minimize the potential hazards.

FLEXIBILITY - Rating High

Depending on demand for services, days of operation of the mobile unit and permanent facility can be adjusted. The mobile unit's schedule can be modified to include additional locations as needed. A special effort to notify residents of changing location would be necessary. In addition, multilingual advertising and telephone appointment services may be necessary.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

The combination alternative will provide HHW disposal services within a 20 minute commute for most residents in the participating cities. Depending on demand for services, frequency of both of these collection services can be expanded in the short- and medium-term planning period.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating High

Residents from any of the participating cities could be able to deliver HHW, by appointment, to the next operating day of either the permanent facility or the mobile unit.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable.

EASE OF IMPLEMENTATION - Rating High: Mobile Unit

Rating Medium: Permanent Facility

A mobile program could be permitted by the Department of Toxic Substances Control under a variance. The mobile countywide HHW disposal program has been implemented in the short-term planning period (before 1995).

The implementation phase for a permanent facility includes site selection, environmental review, permitting, Board of Supervisors' approval, and possibly, facility construction or modification of existing structures. "Permit-by-Rule" regulations for siting permanent HHW facilities are under development by the California Department of Toxic Substances Control. If a site is chosen before the regulations are in place, a variance would need to be obtained from the Department. In addition, the siting of a permanent facility may be subject to the Tanner Plan review process. It appears unlikely that one permanent facility could be operational before the end of the short-term planning period (before 1995).

FACILITY NEEDS - Rating Medium

The mobile collection unit requires waste collection and storage equipment. However, no purchase of land or construction of facilities is required.

The permanent facility will require either location of appropriate site for storage roll-off bins or the construction or modification of a collection and storage structure.

CONSISTENCY WITH LOCAL POLICIES - Rating Medium

Countywide planning efforts have determined that the combination of a mobile unit and a permanent facility for HHW collection appears to be the alternative that best meets the needs of the participating cities. This alternative appears to be consistent with the Tanner Plan recommendations for ongoing, convenient, and immediate need services.

The mobile collection unit requires siting a number of temporary locations and the process of siting a permanent facility may be complex.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

No institutional barriers are known that would prevent the implementation of the combination alternative.

ESTIMATED COST

A preliminary cost analysis for the combination mobile unit plus one permanent facility alternative indicates that this alternative might be implemented at a cost similar to the cost of the periodic events alternative, the mobile collection program alternative, or the five permanent facility alternatives.

A preliminary cost analysis for a permanent facility indicates that the cost of this alternative is dependent, to a large extent, on two factors: availability of sites and facility design.

If an appropriate site could be located that did not require purchase of land, the cost of this alternative would be significantly lower. It might be possible to site a permanent HHW facility at an existing landfill, wastewater treatment plant, or public works facility. However, if siting a permanent facility requires the purchase of property, or if residents opposed the siting of a facility, a significant increase in cost would result.

The second factor that would affect the cost is the actual design of the facility. A range of options exists for structural design and equipment for permanent HHW facilities. These factors would influence cost of implementing this alternative.

It was estimated that it might be possible to implement the mobile unit plus one permanent facility alternative at a cost similar to costs for the other HHW collection alternatives under consideration (periodic; mobile; and five permanent facilities). Costs of all options are driven primarily by siting, waste disposal, event staffing, and capital expenditures. It was estimated that the cost per vehicle service at all four of these options would lie within the \$90 - \$110 range. However, the unknown factors regarding facility siting and design could significantly change this estimate.

END USES (Recyclability and Redistribution Potential) - Rating High

The permanent facility has the potential of facilitating waste exchange activities due to its ability to store valuable products found in the waste stream. The mobile unit has a similar redistribution potential but lacks storage capability of the permanent facility.

4.5 ALTERNATIVE 5: CURBSIDE (CANSIDE) MOTOR OIL COLLECTION

The Town of Los Altos Hills could sponsor curbside or canside pick-up of used motor oil. Used motor oil is often disposed into storm sewers, drains, into the trash or onto the ground by residents who service their own cars. Therefore, motor oil collection can be an effective means of reducing improper disposal of one type of HHW.

WASTE DIVERSION POTENTIAL - Rating High

A curbside oil collection program could serve all households.

ABSENCE OF HAZARD - Rating Medium

The potential exists that oil set on the curb for collection could be disturbed by children, pets, or vehicles. However, residents generally use curbside oil collection programs as directed and existing programs experience minimal problems.

FLEXIBILITY - Rating High

The curbside oil collection alternative can meet growing demand by expanding into previously unserved neighborhoods and multi-family dwellings.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

This alternative requires no travel to a disposal event. In addition, the frequency of service can be adjusted to meet residents' needs.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating High

Curbside motor oil collection programs generally provide weekly or bi-weekly service, thereby providing disposal services to residents preparing to move or otherwise in need of immediate disposal.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable

EASE OF IMPLEMENTATION - Rating Medium

The Town of Los Altos Hills already sponsors a canside collection program of other recyclables, and motor oil could easily be added to the list.

FACILITY NEEDS - Rating High

Existing recycling trucks used for curbside collection of glass, paper, and metals also collect used motor oil. Expansion to a canside/curbside motor oil collection service in the Town of Los Altos Hills would be relatively easy.

CONSISTENCY WITH LOCAL POLICIES - Rating High

Curbside motor oil collection is consistent with local and state policies that encourage HHW recycling. Effective January 1, 1991, pursuant to AB 2597, HHW collection agencies will no longer need a hazardous waste permit if materials accepted are limited to latex paint, used oil, antifreeze, spent lead-acid batteries, and nickel-cadmium, alkaline, carbon-zinc and other small batteries.

Section 25250.11(a), Health and Safety Code, exempts from its HHW permit requirements "any person who receives used oil from consumers or other used oil generator," as long as no more than 20 gallons of used oil are received at a time, and containers hold no more than 5 gallons each.

Government Code Section 66798.9 (Statute, 1989) provides immunity for local agencies operating HHW programs unless the agencies act negligently. Additional immunity from state liability is provided in Health and Safety Code, Section 25366.5 for local governments or their contractors who are running HHW facilities and events. However, HHW programs would still be liable if disposal sites holding the program's HHW were declared a federal Superfund site.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

There are no institutional barriers within Los Altos Hills to this option.

ESTIMATED COST

Costs for this option would vary depending upon the level of service provided to residents. Adding motor oil pickup onto the existing list of materials collected would increase costs of the program by an estimated \$0.25 per customer per month.

END USES (Recyclability and Redistribution Potential) - Rating High

Markets for used motor oil are well-established. Used oil from the Town of Los Altos Hills would be recycled by the franchised hauler in the same manner as used oil from other cities.

4.6 ALTERNATIVE 6: DOOR-TO-DOOR PICKUP FOR ELDERLY AND DISABLED RESIDENTS

A door-to-door pickup program would provide HHW services to residents unable to participate in collection events. Door-to-door pickup would be available by appointment only and the service dates could be coordinated with upcoming mobile unit or periodic events; or a permanent facility in the area. The HHW would be picked up by a registered hazardous waste hauler using licensed hazardous waste transport vehicles that comply with the Department of Transportation (DOT) regulations. HHW collected from residents' homes would be transferred to a permanent HHW facility if the facility was permitted to receive such wastes; to an approved treatment, storage, or disposal (TSD) facility; or transported directly to a permitted hazardous waste disposal facility.

WASTE DIVERSION POTENTIAL - Rating High

A door-to-door HHW pickup service is designed to collect wastes from individuals who may otherwise not have the opportunity to properly dispose of their HHW. This target population, the elderly and disabled unable to participate in other HHW services, represents a moderate percentage of households in the Town of Los Altos Hills.

ABSENCE OF HAZARD - Rating Medium

Proper program design, equipment, and health and safety training can minimize potential hazards associated with door-to-door HHW pickup.

FLEXIBILITY - Rating High

Door-to-door collection services could be operated as an adjunct to periodic events, mobile unit or permanent facility. The service would operate on an appointment basis. The door-to-door service routing plan can be coordinated with other HHW events. This alternatives operation schedule and route can be readily modified.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating Medium

The door-to-door HHW pickup service would require no travel for elderly or disabled residents. The frequency of service would be determined by frequency of other HHW events in the area, as this service would most likely operate as an adjunct to other HHW collection services. Frequency of service is also dependent upon the level of funding available. Costs for door-to-door services may be a serious limiting factor for frequency of service.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating Medium

The door-to-door HHW pickup service is designed to operate on an appointment-only basis due to the cost of providing this service to a small number of residents. If the door-to-door HHW pickup service is operating as an adjunct to a permanent facility, with permanent staff, equipment, and storage space, the potential exists to provide immediate need services to elderly and disabled residents.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable

EASE OF IMPLEMENTATION - Rating Medium

If a door-to-door service operated in conjunction with a permanent facility, the permanent facility would need a variance to accept waste collected by door-to-door service. Collected HHW delivered to the permanent facility could be sorted and stored to enhance recycling and reuse potential. In addition, waste could be bulked to reduce disposal costs. Another method of providing door-to-door service would be to contract with a licensed hazardous waste management company which would transport collected HHW directly to a disposal facility.

It is anticipated that a door-to-door HHW pickup service could be implemented in the medium-term planning period (after 1995), either as an adjunct to other HHW collection services or by contracting for services of a private hazardous waste disposal company.

FACILITY NEEDS - Rating Medium

Door-to-door HHW pickup services require trucks equipped to transport, handle, sort, and store hazardous materials. Space is also needed to store the collected materials unless the wastes are delivered directly to a disposal facility. It is possible that this service could be obtained on a contract basis from a licensed hazardous waste management company.

CONSISTENCY WITH LOCAL POLICIES - Rating High

Door-to-door HHW collection does not appear to be incompatible with local policies. The Town of Los Altos Hills supports the provision of services to its residents regardless of handicap or physical limitation.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

There are no existing contracts or agreements that would prevent the implementation of a door-to-door HHW pickup service for elderly and disabled residents.

ESTIMATED COST

Door-to-door HHW pickup services have been sponsored by the Cities of Burbank and San Diego. In Burbank, a licensed private waste hauler collected HHW from approximately 200 elderly and disabled residents. The service was operated in conjunction with a city-sponsored HHW drop-off

event. The routing schedule was prepared by city staff. The collected HHW was delivered to the drop-off event. The cost for this service was \$8,000. This cost includes only the actual collection of the HHW from the elderly and disabled residents, and does not include planning time or waste disposal costs which were included with the costs of operating the drop-off event.

END USES (Recyclability and Redistribution Potential) - Rating Medium

Recyclability and redistribution potential of HHW collected in a door-to-door service would depend on whether or not the service was associated with other HHW collection programs. If collected HHW was delivered to a permanent facility, recyclable and reusable materials could be retrieved. However, if the door-to-door service was operated independent of other HHW programs, all wastes would be disposed.

4.7 ALTERNATIVE 7: HAZARDOUS WASTE EXCLUSION PROGRAM/ LOAD CHECKING

The purpose of a load checking program is to detect and deter attempts to dispose of prohibited wastes in landfills. It involves visual inspection for hazardous waste at the entrance to the landfill and at the working face. If prohibited waste is identified, the generator is notified and becomes responsible for removing the waste. If the generator cannot be found, the waste is removed and properly disposed. Other waste acceptance control activities include sign posting and employee training. In addition, waste haulers notify customers about the prohibition on disposing of hazardous waste in the landfill by posting signs on dumpsters, including messages in utility buildings and by training employees to inspect incoming waste for hazardous materials.

WASTE DIVERSION POTENTIAL - Rating Medium

The load checking program diverts a small amount of HHW from landfill disposal. However, load checking and the other hazardous waste exclusion programs educate generators, haulers, disposal facility personnel, and the public about the proper disposal of hazardous waste. An effective hazardous waste exclusion program reduces landfill disposal of HHW in landfills.

ABSENCE OF HAZARD - Rating Medium

The potential hazards involved in a load checking program include the risk from exposure while inspecting and handling waste. Proper equipment, training and management of the load checking program can reduce hazards. Other waste acceptance control activities, such as sign posting, training, and notification of proper HHW procedures pose minimal hazards.

FLEXIBILITY - Rating Medium

The load checking program is mandated by the state. Additional inspections and notifications could be added to strengthen existing programs.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Not Applicable

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Not Applicable

LIMITED SHIFT IN WASTE TYPE GENERATION - Rating Medium

A Hazardous Waste Exclusion Program might result in a desirable shift in waste type generation. By preventing illegal landfill disposal of hazardous waste, residents may be more likely to purchase and use less hazardous substitutes.

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It is possible that load checking might deter landfill disposal of hazardous waste but at the same time result in an increase in illegal disposal elsewhere. It is anticipated, however, that illegal disposal will decrease as legal disposal options become more widely available and awareness increases about environmental impacts of improper disposal.

EASE OF IMPLEMENTATION - Rating High

The Hazardous Waste Exclusion Program is currently in place at all landfills in the County of Santa Clara.

FACILITY NEEDS - Rating High

No new facilities are needed for the load checking program. Signs have been posted at the landfills.

CONSISTENCY WITH LOCAL POLICIES - Rating High

The Hazardous Waste Exclusion Program is consistent with local and state policies to keep prohibited wastes from entering the landfill. A load checking program is required in the State of California. The State Water Resources Control Board requires landfills to operate hazardous waste load checking programs (Section 2523, Title 23, California Code of Regulations (CCR)). The Department of Health Services and the California Integrated Waste Management Board require solid waste facilities to follow certain procedures regarding their load checking programs. The Department of Health Services requires a solid waste facility with a hazardous waste load checking program to obtain an identification number as a hazardous waste generator. Hazardous waste will be stored for less than 90 days in accordance with a hazardous waste permit issued by the Department of Health Services. If hazardous waste will be stored for more than 90 days, the solid waste facility must apply to the Department of Health Services for a hazardous waste facility permit or variance.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

No contractual or other institutional barriers are known that would interfere with the continuation of Hazardous Waste Exclusion Programs.

ESTIMATED COST

Since this option is already in place, there are no additional costs associated with continued exclusion and load checking. Program improvements and changes may have implementation costs, and would have to be looked at independently.

END USES (Recyclability and Redistribution Potential) - Rating Low

It is unlikely that significant amounts of HHW in good condition would be retrieved in the load checking program. Efforts by waste haulers to identify and reject HHW might encourage residents to use proper disposal methods, including recycling materials such as automotive batteries, latex paint and motor oil. Landfill sign posting and utility bill notices also encourage residents to use the city-sponsored HHW collection system that will separate a number of materials for recycling and redistribution.

4.8 ALTERNATIVE 8: HHW RECYCLING COMPONENT

A HHW Recycling Component would implement recycling procedures at all HHW collection programs. Oil, auto batteries and latex paint are currently recyclable. Solvent and antifreeze recycling may be implemented in the future.

WASTE DIVERSION POTENTIAL Rating High

Markets are already established for waste oil, auto batteries, and latex paint. Strong community support exists for the concept of recycling. HHW recycling diverts wastes from both solid waste landfills and hazardous waste landfills.

ABSENCE OF HAZARD - Rating Medium

Some hazards are associated with collection and handling of latex paint. Latex paint that has been stored for many years may contain mercury and/or lead. Older latex paint, improperly labeled paint, paint not in its original container, and possibly contaminated paint should be disposed instead of recycled. Collection of used auto batteries may present hazards if batteries are cracked and leaking. Oil collection presents hazards of accidental spillage or exposure in a curbside collection program. However, recycling programs for latex paint, motor oil and auto batteries are well-established in some Santa Clara County communities and have operated safely. Proper staff training and operating procedures can reduce potential hazards.

FLEXIBILITY - Rating High

As more residents use the HHW programs, additional collection opportunities and HHW handling space might be required. Increasing amounts of recyclable materials can be accommodated without major changes in the program.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

The HHW recycling component could be incorporated into mobile collection and/or the permanent facility.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Rating High

Recyclable HHW can be accepted at a mobile unit and/or permanent facility, both of which are able to accommodate residents requesting immediate HHW disposal service.

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable

EASE OF IMPLEMENTATION - Rating High

Recycling of oil, auto batteries, and latex paint are well-established components of some city-sponsored programs and will also be incorporated into the Countywide HHW Program. No obstacles are known that would hinder the implementation of these recycling procedures for countywide programs co-sponsored by Los Altos Hills.

FACILITY NEEDS - Rating High

No additional facilities are required to operate the recycling component of a HHW collection program.

CONSISTENCY WITH LOCAL POLICIES - Rating High

The Town of Los Altos Hills encourages recycling of solid and hazardous waste. The County Hazardous Waste Management (Tanner) Plan ascribes to the waste management hierarchy in which recycling is the most desirable management option. In addition, state regulations encourage the collection and recycling of latex paint, used oil, antifreeze, and lead-acid batteries.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

There are no known long-term contracts or franchise agreements that would interfere with recycling of HHW.

ESTIMATED COST - Rating High

The itemized costs for recycling HHW from a permanent or mobile collection facility will include only the cost of temporary storage and supervision. Recycling materials will save the Town money in disposal fees, thus the overall cost of a recycling program for HHW is expected to be minimal.

END USES (Recyclability and Redistribution Potential) - Rating High

Recycling options for motor oil, automotive batteries, and latex paint are well-established. Common uses of recyclable HHW include the following:

- *Latex paint* can be collected, sorted, consolidated, blended, repackaged, and sold or given to local public agencies and nonprofit groups. It is commonly used to cover graffiti. It can also be sent to a paint company to be re-manufactured.
- *Used oil* is a valuable resource. Recycling used oil saves energy and natural resources. Used oil can be refined into lubricating oil, reused as motor oil, or reprocessed and used as fuel in industrial burners and boilers. The Environmental Protection Agency estimates that only 1 gallon of used oil is needed to make 2.5 quarts of lubricating oil, compared to 42 gallons of raw crude oil.
- *Lead-acid batteries*: According to the CIWMB, 70 percent of spent lead-acid batteries are recycled nationwide. In California, state law requires retailers to accept trade-in of used batteries. Consumers can also deliver batteries to lead-acid battery recyclers or to HHW programs.

The average lead-acid battery contains 17.5 pounds of lead and 1.5 pounds of sulfuric acid. After the lead is separated from the non-metallic components of the battery, it is then smelted to produce soft lead and lead alloys. The non-metallic materials include sulfuric acid, which is neutralized and released into the sewer; and other non-recyclable, non-hazardous materials are disposed. (Household Hazardous Waste, Lead-Acid Batteries, CIWMB, September, 1990).

- *Small Household Batteries*: Recycling options for small household batteries are very limited at this time. Silver oxide button batteries may be recycled, but substantial obstacles exist to collecting and sorting these batteries. Consumer nickel cadmium battery recycling may be available in the near future. Recycling options for small household batteries are currently under study by the CIWMB. Results of this study and related research will be monitored and resulting recommendations will be considered for implementation.

- *Antifreeze*: Used antifreeze can be recycled for use by the mining and glycol industries. Antifreeze is sprayed on coal to inhibit sticking. Antifreeze can also be used for airplane de-icing solution, cement grinding and brake fluid. (Household Hazardous Waste, Antifreeze, CIWMB, September, 1990).

4.9 ALTERNATIVE 9: HHW WASTE EXCHANGE COMPONENT

A waste exchange program recovers valuable materials from the HHW waste stream and makes these materials available for use. The County Division of Environmental Health Services estimates that approximately 5% of incoming waste can be diverted for use. Waste exchange activities can take place at period events, mobile collection units, and permanent facilities. A permanent facility allows for storage of valuable products thereby enhancing waste exchange activities.

WASTE DIVERSION POTENTIAL - Rating High

Usable materials can be diverted from disposal and made available to participating residents, voluntary organizations and public agencies. A high percentage of usable materials found in the incoming waste stream could be diverted from disposal by this program.

ABSENCE OF HAZARD - Rating Medium

Waste exchange takes place under the supervision of HHW program staff, thereby limiting hazard. However, care must be taken that outdated or contaminated products are not redistributed. In addition, residents should be required to sign a waiver of liability before accepting reusable products.

FLEXIBILITY - Rating High

A HHW waste exchange component can be implemented or eliminated depending on available space, staff, and demand.

AVAILABILITY OF SERVICE (Nearby and Frequent Service) - Rating High

HHW waste exchange activities can be added to periodic events, mobile collection or a permanent facility.

PROVIDES IMMEDIATE NEED DISPOSAL SERVICES - Not Applicable

LIMITED SHIFT IN WASTE TYPE GENERATION - Not Applicable

EASE OF IMPLEMENTATION - Rating High

A HHW waste exchange component involves examination of incoming waste and segregation of usable materials for distribution to residents or public agencies. The implementation of waste exchange activities is tied to the operation of periodic, mobile, or permanent facility, all of which can be implemented in the short-term planning period (before 1995).

FACILITY NEEDS - Rating High

No new facilities would be required to implement a HHW waste exchange component. However, the ability to store valuable products between events at the permanent facility will increase the program's ability to redistribute valuable products.

CONSISTENCY WITH LOCAL POLICIES - Rating High

The Town of Los Altos Hills supports efforts to reduce volume and toxicity of the waste stream.

ABSENCE OF INSTITUTIONAL BARRIERS - Rating High

There are no known institutional barriers, such as contracts or franchise agreements, that would interfere with implementation of waste exchange activities as a component of HHW collection programs.

ESTIMATED COST

Waste exchange activities are not expected to add to the cost of HHW collection. In fact, this alternative has the potential to reduce waste disposal costs by distributing valuable products to residents and agencies.

END USES (Recyclability and Redistribution Potential) - Rating High

The purpose of a HHW waste exchange component is the redistribution of usable products.

Table 4.1 Summary of Evaluation of HHW Alternatives

Evaluative Criteria

Program Alternative	Waste Diversion Potential	Absence of Hazard	Flexibility	Availability of Service
<i>Alternative 1—Periodic Drop-off</i>	HIGH	MEDIUM	MEDIUM	MEDIUM
<i>Alternative 2—Permanent Facilities</i>	HIGH	HIGH	HIGH	HIGH
<i>Alternative 3—Mobile Collection</i>	HIGH	MEDIUM	HIGH	HIGH
<i>Alternative 4—Combination</i>	HIGH	MED/HIGH	HIGH	HIGH
<i>Alternative 5—Curbside Motor Oil</i>	HIGH	MEDIUM	HIGH	HIGH
<i>Alternative 6—Door-to-Door</i>	HIGH	MEDIUM	HIGH	MEDIUM
<i>Alternative 7—Exclusion</i>	MEDIUM	MEDIUM	MEDIUM	NA
<i>Alternative 8—Recycling</i>	HIGH	MEDIUM	HIGH	HIGH
<i>Alternative 9—Exchange</i>	HIGH	MEDIUM	HIGH	HIGH

Evaluative Criteria

Program Alternative	Provides for Immediate Need	Limited Shift in Generation	Ease of Implementation	Facility Need
<i>Alternative 1—Periodic Drop-off</i>	MEDIUM	NA	HIGH	HIGH
<i>Alternative 2—Permanent Facilities</i>	HIGH	NA	MEDIUM	LOW
<i>Alternative 3—Mobile Collection</i>	HIGH	NA	HIGH	HIGH
<i>Alternative 4—Combination</i>	HIGH	NA	HIGH/MED	MEDIUM
<i>Alternative 5—Curbside Motor Oil</i>	HIGH	NA	MEDIUM	HIGH
<i>Alternative 6—Door-to-Door</i>	MEDIUM	NA	MEDIUM	MEDIUM
<i>Alternative 7—Exclusion</i>	NA	MEDIUM	HIGH	HIGH
<i>Alternative 8—Recycling</i>	HIGH	NA	HIGH	HIGH
<i>Alternative 9—Exchange</i>	NA	NA	HIGH	HIGH

Evaluative Criteria

Program Alternative	Consistency with Local Policies	Absence of Institutional Barriers	Estimated Cost	End Uses (Potential)
<i>Alternative 1—Periodic Drop-off</i>	MEDIUM	HIGH	\$90-110 per Car	MEDIUM
<i>Alternative 2—Permanent Facilities</i>	MEDIUM	HIGH	\$90-110 per Car	HIGH
<i>Alternative 3—Mobile Collection</i>	HIGH	HIGH	\$90-110 per Car	MEDIUM
<i>Alternative 4—Combination</i>	MEDIUM	HIGH	\$90-110 per Car	HIGH
<i>Alternative 5—Curbside Motor Oil</i>	HIGH	HIGH	.25/ Household	HIGH
<i>Alternative 6—Door-to-Door</i>	HIGH	HIGH	\$40/ Household	MEDIUM
<i>Alternative 7—Exclusion</i>	HIGH	HIGH	NA	LOW
<i>Alternative 8—Recycling</i>	HIGH	HIGH	NA	HIGH
<i>Alternative 9—Exchange</i>	HIGH	HIGH	\$0.0	HIGH

CHAPTER 5

SELECTION OF HHW PROGRAM

5.1 ALTERNATIVES SELECTED

The selection of HHW management alternatives was based on the evaluation described above in Chapter 4 and summarized in Table 4.1. as well as the results of the solid waste generation study.

5.2 SHORT-TERM PLANNING PERIOD PROGRAMS

The following alternatives were selected to properly manage HHW during the short-term planning period (1991-1995) in the Town of Los Altos Hills. Several of these options were chosen for their ability to enhance and complement others. In many cases, these programs will be coordinated by the County of Santa Clara, and the Town of Los Altos Hills will be only one of several jurisdictions taking advantage of economies of scale.

- Alternative 4 Combination Mobile Unit Plus One Permanent Facility (implement mobile unit in short-term and permanent facility in medium-term planning period)
- Alternative 7 Hazardous Waste Exclusion Program
- Alternative 8 Household Hazardous Waste Recycling Component
- Alternative 9 Household Hazardous Waste Exchange Component

Alternative 4, the combination program which includes both a mobile collection unit and one permanent facility, was selected for the County-wide HHW management plan. The mobile collection unit has the ability to provide convenient, cost-effective services to a large geographical area. The unit will operate within a 20 minute commute of most residents in participating cities. A mobile collection unit is highly flexible as both location and frequency of operation can be readily changed to accommodate variations in demand or shifts in population density. Residents requesting immediate disposal services can be accommodated at the mobile unit. The mobile unit will operate on an appointment basis. Residents arriving at the mobile unit without an appointment will be accommodated when possible. The pilot mobile HHW disposal program modeled after this alternative began in November 1991 and continued into fiscal year 1992-93.

The permanent collection facility has the ability to provide convenient, cost-effective services for a large, centralized portion of the county. The permanent facility can also meet the needs of residents throughout the county who are moving and request immediate disposal services.

A permanent facility can process participants efficiently and safely due to the presence of permanent, trained staff; proper equipment; and storage capabilities. Options for reuse and recycling of collected materials are enhanced due to space for storage. A permanent facility is flexible in that the hours of operation can increase as demand for HHW disposal services increases.

Depending on the complexity of the siting, environmental review, and permitting process, the facility should be operational during the medium-term planning period (after January 1, 1995). The planning process is already underway for the permanent facility.

Additional advantages of this alternative over the periodic events alternative are as follows. It would relieve cities of the burden of planning and staffing HHW events. Waste disposal and planning costs may be lower due to the advantage of an economy of scale for a countywide program. The combination of these two methods of HHW collection (a mobile unit plus one

permanent facility) has advantages in the location and frequency of service, ease of implementation, and ability to provide immediate need service in a cost-effective manner.

Alternative 7, the hazardous waste exclusion program, has the potential to divert incoming HHW from disposal at the landfill. This alternative can also help to educate residents and waste haulers about proper disposal of HHW. Hazardous waste exclusion programs are mandated by the state, and are already in place at all landfills in Santa Clara County.

Alternative 8, the HHW recycling component, was selected for inclusion in the permanent facility and mobile collection unit. Materials such as latex paint, motor oil, and automotive batteries can be easily separated from the incoming HHW and sent for recycling instead of disposal. The recycling component has the potential of reducing the costs of the HHW collection program as there will be a reduction in the amount of HHW sent for more expensive hazardous waste disposal. Recyclable HHW materials will be sent only to permitted facilities and environmental compliance records will be maintained on file for all waste haulers and treatment, storage, and disposal companies.

Alternative 9, a HHW waste exchange component, was selected due to its ability to divert usable HHW from disposal by making it available for redistribution to residents, public agencies, and non-profit organizations. Waste exchange activities can take place at both the mobile collection unit and the permanent facility. The HHW waste exchange component is not expected to add to program cost, and in fact, may reduce costs by reducing the amount of HHW sent for disposal.

5.3 MEDIUM-TERM PLANNING PERIOD PROGRAMS

In addition to continuing programs selected for the short term, the following programs were selected to manage HHW during the medium-term planning period (1996-2000).

Alternative 5 Curbside Motor Oil Collection

Alternative 6 Door-to-door Pickup for Elderly and Disabled Residents

Alternative 5, curbside/curbside motor oil collection, was selected due to its potential to divert large quantities of one of the most prevalent types of HHW. This alternative only requires the expansion of the current recycling program.

Alternative 6, door-to-door HHW pickup for elderly and disabled residents, was selected due to its potential to divert HHW from a small target population that would otherwise not have the opportunity to participate in the HHW collection programs. This service could be offered in conjunction with operation of the permanent facility or the service could be contracted with a private company.

All of the alternatives chosen for the short-term planning period will be continued into the medium-term planning period (1996-2000) with the addition of Alternatives 5 and 6. Additional source reduction options will be explored in the medium-term planning period as new technologies and considerations influence the HHW program.

5.4 TYPES AND QUANTITIES OF HHW ANTICIPATED TO BE COLLECTED, RECYCLED, AND/OR DISPOSED

The amount of HHW to be collected, recycled or disposed from 1991 to 2000 in the Town of Los Altos Hills is dependent on several factors: convenience, accessibility, and efficiency of the collection services; funding available to operate the services, and the success of source reduction efforts. It is anticipated that demand for HHW services will grow as more residents become aware of proper disposal procedures and as the population of the city increases. The population of the

Town of Los Altos Hills is expected to increase approximately 1% annually. At the same time, public education efforts should result in changes in buying habits that result in a decrease in HHW generation. Using 1990 as the baseline year, the city anticipates that implementation of the programs described in this element will result in annually increasing diversion of HHW from the municipal waste stream in the Town of Los Altos Hills.

Each year, the Town will review participation rates and demand for services. In addition, the amount of HHW diverted and the amount of HHW remaining in the municipal waste stream will be monitored periodically by waste characterization studies. Based on these evaluations, additional HHW services may be provided as funds become available. Potential sources of additional funds include surcharges on garbage collection fees and advanced disposal fees added to product purchase prices.

Table 5.1 below shows the estimated amounts of HHW to be collected, recycled and/or disposed through the existing and proposed programs in the 1991-92 fiscal year in the Town of Los Altos Hills.

Table 5.1 Estimated Amount of HHW To Be Collected In 1991-1992

	<u>Pounds</u>	
	<u>Recycled</u>	<u>Disposed</u>
Flammables	350	1,000
Pesticides	50	250
Corrosives	50	250
Oxidizers	50	400
Non-RCRA HHW	200	700
Automotive Batteries	300	400
TOTAL	1,000	3,000

The end uses for diverted materials are described in this Element in Section 5.8.

At present, it is not possible to determine the amount of HHW that will be diverted by source reduction education efforts. Methods for evaluating the success of source reduction activities are currently under development. Possible methods include monitoring of changes in purchasing habits using industry marketing data; random telephone surveys; and questionnaires at collection events.

The Town intends to support legislative efforts, as described in the County Hazardous Waste Management (Tanner) Plan, to encourage the development of less- or non-hazardous products. As such products become available to replace currently marketed products that generate HHW, it may be possible to quantify the resulting reduction in HHW generation for specific products or materials.

5.5 FACILITIES NEEDED FOR IMPLEMENTATION

The permanent facility could be a lower-cost operation utilizing roll-off bins, fencing, and spill/run-off containment structures. Other options include the use of a modified existing structure or a specially designed and constructed building. A permanent facility should have separate storage bays or bins, explosion proofing, ground columns, proper containment, sufficient ventilation and adequate emergency response and safety equipment. It should be situated on an impervious surface and be fenced for security. Planning for a permanent HHW collection site is in the early stages and potential sites are being identified. Additional permanent facilities may be developed in the future.

5.6 HANDLING AND DISPOSAL METHODS

Handling and disposal methods are regulated by local, state and federal agencies. The mobile unit and permanent facility will be staffed by professionals trained to handle hazardous materials. Regulations will be monitored for changes, and HHW programs will be modified accordingly.

Anti-freeze collected by the Countywide HHW program will be sent for fuel blending, along with the oil-based paints and solvents; or sent for recycling. Disposal methods will depend upon the amount of anti-freeze collected and costs of disposal options. Latex paint, automotive batteries, and motor oil will be sent for recycling. Acids and bases will be sent for incineration. Pesticides will be sent to a hazardous waste incinerator.

Contractors who will haul and dispose of waste collected by the program must be licensed hazardous waste haulers. Environmental compliance of treatment, storage and disposal facilities will be monitored by the Santa Clara County Department of Environmental Health Services. To the maximum extent feasible, collected HHW will be diverted from disposal for recycling or reuse.

5.7 MULTI-JURISDICTIONAL HHW EFFORTS

As described in Part 1, Chapter 2.2, the Town of Los Altos Hills intends to participate in the Countywide HHW Program for collection services. Multi-jurisdictional public education programs are described in detail in Chapter 8. Other multi-jurisdictional efforts are expected to provide convenient, accessible, and cost-effective services for residents of the Town of Los Altos Hills.

Representatives from all cities and the County participated in the Household Hazardous Materials Working Group planning process which developed the countywide HHW program. The program has been reviewed and endorsed by the Solid Waste Technical Advisory Committee (TAC), and the Inter-governmental Council (IGC) Solid Waste Committees. County departments received the approval to administer the program from the Board of Supervisors on 2/26/91. The Board Transmittal authorizing the program is included as Attachment 3.

Implementing the Countywide Program will promote regional cooperation and expand services available to residents of all participating jurisdictions. Providing convenient, year-round access to service on a countywide basis will maximize the amount of HHW diverted from the municipal waste stream and meet the demands for ongoing HHW disposal services. A copy of the agreement for the Countywide program is included as attachment 4.

5.8 REUSE, RECYCLING, AND END USES FOR DIVERTED MATERIALS

In 1990, approximately 15% of HHW collected from Los Altos Hills residents was recycled. This includes 0.3 tons of oil, paint and automotive batteries collected at HHW events. In the future, Los Altos Hills hopes to recycle at least 25% of its HHW.

It is anticipated that the Countywide HHW Program will recycle a greater percentage (approximately 20%) of total HHW collected in the Town of Los Altos Hills. New recycling options may become available for materials such as oil-based paints and solvents in the future and should result in a greater percentage of HHW sent for recycling. For recycling methods for specific wastes, see Chapter 4, Section 8 of this Element.

A HHW waste exchange component will be included at the mobile collection unit and permanent facility to further divert reusable materials from disposal. The material should be in its original container, and, if opened, the program staff must judge the contents to be sound and uncontaminated before the material can be redistributed. The party accepting material for reuse will be required to sign a liability waiver releasing the facility operator from responsibility.

End uses for materials diverted through HHW recycling or reuse efforts are described below.

COUNTYWIDE HHW COLLECTION SYSTEM

Health Services staff contract with private companies for lab-packing, transportation, recycling and disposal of the waste.

The Department of Planning and Development serves as the lead agency for public education efforts. Staff coordinates with other city, county and non-profit agencies to maximize use of available resources and avoid duplication in the development of educational materials and programs. Educational projects emphasize source reduction in the use of potentially hazardous products by providing information about less-hazardous alternative materials and techniques, in addition to information about safe disposal practices.

Participants in Pilot Program

- Latex paint can be collected, sorted, consolidated, blended, repackaged, and sold or given to local public agencies and nonprofit groups. It is commonly used by government agencies to cover graffiti. It can be sent to a paint company to be remanufactured and even sold in paint stores as reconditioned paint.
- Used oil is a valuable resource. Recycling used oil saves energy and natural resources. Used oil can be refined into lubricating oil, reused as motor oil, or reprocessed and used as a fuel in industrial burners and boilers. The Environmental Protection Agency estimates that only 1 gallon of used oil is needed to make 2.5 quarts of lubricating oil, compared to 42 gallons of raw crude oil.
- According to the CIWMB, 70 percent of spent lead-acid batteries are recycled nationwide. In California, state law requires battery retailers to accept their customer's used battery. Consumers can also deliver batteries to lead-acid battery recyclers, some scrap metal businesses and to HHW programs.

The average lead-acid battery contains 17.5 pounds of lead and 1.5 pounds of sulfuric acid. After the lead is separated from the non-metallic components of the battery, it is smelted to produce soft lead and lead alloys. The non-metallic materials include sulfuric acid, which is neutralized and

released into the sewer, and other non-recyclable, non-hazardous materials are disposed of (*Household Hazardous Waste, Antifreeze, CIWMB, September, 1990*).

- Used antifreeze can be recycled for use by the mining and glycol industries. Antifreeze is sprayed on coal to inhibit sticking. Antifreeze can also be used for airplane de-icing solution, cement grinding and brake fluid (*Household Hazardous Waste, Antifreeze, CIWMB, September, 1990*).
- Recycling options for small household batteries are very limited at this time. Silver oxide button batteries may be recycled, but substantial obstacles exist to collecting and sorting these batteries. Consumer nickel cadmium battery recycling may be available in the near future. Recycling options for small household batteries will be monitored and resulting recommendations will be considered for implementation.

CHAPTER 6

PROGRAM IMPLEMENTATION

This section describes the responsible parties, necessary tasks, estimated costs, and sources of funding for the implementation of the selected HHW program.

6.1 GOVERNMENT AGENCIES RESPONSIBLE FOR IMPLEMENTATION

The Public Works Department is responsible for oversight of the HHW management in the Town of Los Altos Hills. The Director of Public Works will be the liaison between the Town and the Countywide HHW Program, and will participate in planning and evaluating the HHW collection and education activities as they pertain to the Town.

The Countywide HHW Program will be implemented by the County of Santa Clara Division of Environmental Health Services and the Department of Planning and Development. The Division of Environmental Health Services will serve as the lead agency for the administration and implementation of the HHW collection program. Hazardous materials specialists and environmental health specialists will be utilized for development and initial implementation of the collection program. A public health laboratory is available. Health Department staff will contract for transportation and disposal of the HHW in compliance with federal, state, and local regulations.

The Department of Planning and Development will serve as the lead agency for public education. The Planning Department will coordinate the educational efforts with participating cities, County Environmental Health, Santa Clara Valley Water District, the wastewater treatment facilities, schools, and non-profit agencies.

6.2 IMPLEMENTATION TASKS AND SCHEDULE FOR SHORT-TERM AND MEDIUM-TERM PLANNING PERIODS

The schedules for implementation for the selected HHW programs are included in Table 6.1. Once established, it is anticipated that programs scheduled for implementation in the short-term planning period will continue during the medium-term planning period. However, each program will undergo an annual evaluation and may be modified to meet the needs of the residents of Los Altos Hills. The completion dates included in Table 6.1 are estimates and may be modified.

Table 6.1
Implementation Tasks and Schedules for Short-and Medium-Term Planning Periods.

TASK	COMPLETION DATE
<u>MOBILE COLLECTION UNIT</u>	
Formalize inter-jurisdictional Relationships for HHW Services	1991
Select Mobile Sites	1991
Obtain Permits	1991-1992
Purchase Equipment and Supplies	1991
Recruit and Train Staff	1991, ongoing
Develop Collection Program Schedule	1991, annually
Develop Record Keeping System	1991
Evaluate Environmental Compliance of Contractors	1991, ongoing
Contract for Waste Transportation, Recycling, and Disposal Services	1991
Develop and Advertise Telephone Appointment and Information Line	1991
Advertise Mobile Unit Schedule	1991, ongoing
Conduct Mobile Collection Events	1991, ongoing
Conduct Annual Evaluation of Mobile Unit Program	1992, annually
Adjust Program and Service Based on Desired Level of Participation and Feedback from Cities and residents	1992, annually
<u>PERMANENT FACILITY</u>	
Identify Potential Sites	1994
Evaluate Staffing and Operational Alternatives	1994-1995
Identify Permit Requirements	1994-1995
Select Site	1995-1996
Obtain Permits, Variances	1995
Develop Agreement Between County and Site Location	1995
Construct/Modify the Facility	1995-1996
Obtain Equipment and Supplies	1995-1996
Evaluate Environmental Compliance of Contractors	1995, ongoing
Contract for Waste Transportation, Recycling, and Disposal Service	1995, ongoing
Recruit and Train Staff	1995, ongoing
Develop Record Keeping System	1995-1996
Advertise Permanent Site Location and Hours	ongoing
Open Permanent Facility	1995
Conduct Annual Evaluation of Permanent Facility	annually
Adjust Program and Service Based on Cities' Desired Level of Participation and Feedback from City and County Residents	annually

<u>CURBSIDE MOTOR OIL COLLECTION</u>	
Explore option of curbside motor oil collection	1996
If service is considered to be feasible consider implementation steps	1997, ongoing
<u>HAZARDOUS WASTE EXCLUSION PROGRAM</u>	
Continue Operation of Hazardous Waste Exclusion Program	ongoing
Include Report on Hazardous Waste Exclusion Program in Annual Evaluations	annually

<u>HHW RECYCLING COMPONENT</u>	
Evaluate Environmental Compliance Records of HHW Recycling Contractors	1991, ongoing
Contract for Recycling Services for Collected HHW	1991, ongoing
Re-evaluate and Update Recycling Options Annually	1991, annually
<u>HHW EXCHANGE COMPONENT</u>	
Include HHW Waste Exchange Procedures in Staff Training	1991, ongoing
Develop Waiver for Residents to Sign Before Accepting Materials	1991
Include Additional Table and Storage at Mobile Unit and Permanent Facility	1991, ongoing
<u>HHW PICK-UP FOR ELDERLY AND DISABLED RESIDENTS</u>	
Determine Need for Special Collection Services	1996
Obtain Estimated Costs for Service	1996
Evaluate Feasibility of Special Collection Services	1996
If Service is Considered to be Feasible, Begin Implementation Steps:	1996
-Obtain Required Approvals from City Council	1996
-Identify and Obtain Funding	1996-1997
-Coordinate Service with Countywide HHW Program Schedule	1996-1997
-Hire or Contract Collection Services	1996-1997
-Establish Telephone Appointment System	1996-1997
-Advertise Service	1996-1997
-Provide Collection Service	1997, ongoing
<u>MONITORING AND EVALUATION OF HHW PROGRAM</u>	
Obtain Records from Mobile Unit and Permanent Facility Administrator	1992, annually
Obtain Records from Hazardous Waste Exclusion Programs	1992, annually
Conduct Survey of Residents	1992, annually
Evaluate Adequacy of Services	1992, annually
Modify Programs as Necessary	1992, annually

6.3 COST OF PROGRAMS

The Town of Los Altos Hills' estimated annual costs for 1991 for HHW programs are summarized in Table 6.2. below. Each year, the Town will review its HHW services provided through both Countywide HHW as well as potential programs sponsored by the Town.

Table 6.2 Costs for Selected Programs, 1991

	Estimated Annual Costs	Source of Funding
Alternative 4 Permanent and Mobile Collection	\$10,000	Franchise and Disposal Fees
Alternative 7 HHW Exclusion	\$ 0	Not Applicable
Alternative 8 HHW Recycling	\$1,000	Franchise and Disposal Fees
Alternative 9 HHW Exchange	\$1,000	Franchise and Disposal Fees

6.4 SOURCES OF FUNDING FOR IMPLEMENTATION OF HHW PROGRAM

As indicated in Table 6.2, the Town of Los Altos Hills will fund its HHW programs through moneys collected through franchise and disposal fees.

CHAPTER 7

MONITORING AND EVALUATION

7.1 METHODS TO QUANTIFY AND MONITOR ACHIEVEMENT OF SHORT-TERM PLANNING PERIOD OBJECTIVES

OBJECTIVE #1: PROVIDE RESIDENTS OF LOS ALTOS HILLS WITH ACCESS TO CONVENIENT HOUSEHOLD HAZARDOUS WASTE COLLECTION SERVICES

Evaluation Method 1 - Participation records will be kept at all events and programs. Results will be compiled for inclusion in annual reports.

Evaluation Method 2 - Analyses will be done of the geographical distribution of collection event participants. If communities or neighborhoods are found to be under-represented, the causes of the under-representation will be analyzed and appropriate steps will be taken to address this problem. This data will be included in annual reports.

Evaluation Method 3 - Progress on siting, permitting, and constructing a permanent HHW collection facility will be monitored by the County Health Services Administrator every 3 months to assure the project is progressing on schedule. A progress report on the development and operation of the permanent facility will be included in annual reports.

Evaluation Method 4 - An annual survey of participants will help to determine the level of satisfaction and to identify problems with the program. Participants will be queried regarding: ease in obtaining information about the program; length of wait for appointment; convenience of location; length of wait at collection site; the service provided by the collection event staff; and convenience of operating hours.

Evaluation Method 5 - The amount (tonnage) of material collected by all HHW programs will be recorded. This data will be compiled and included in annual reports.

It should be noted that the total waste collected figures can be misleading for use as a program evaluation criterion. A number of factors can affect these figures, making year-to-year comparisons difficult. For example, successful source reduction efforts will reduce the amount of HHW generated per household. Furthermore, many households' first drop-off is likely to be larger than subsequent drop-offs because it includes the items that have been stored for extended periods of time. Therefore, while HHW collection programs will become more accessible and efficient, the amount of HHW collected per household may actually decline over time. These effects may be particularly noticeable during the medium-term planning period (1996-2000).

Despite these limitations, the total amount collected is an important element in evaluating the success of the program. Every effort will be made to collect accurate data on amounts of HHW collected. The Countywide HHW Program's efforts to standardize HHW measurement methods will increase the accuracy of these evaluation efforts.

Evaluation Method 6 - The baseline waste characterization study data will be compared to subsequent waste characterization studies to evaluate the amount of HHW entering the landfill.

This type of comparison should be used with caution. In addition to the limitations described above, the percentage of the waste stream that is HHW in future waste characterization studies may not be an accurate means of evaluating the HHW program. The solid waste recycling, composting

and source reduction programs will substantially reduce the overall amount of solid waste in the short-term planning period. The amount of HHW entering the landfill is expected to decline, but may not decline at the same rate as solid waste. This may result in an increase in the percentage of HHW in the solid waste stream, while the amount of HHW may actually be decreasing. Adjustments should be made to account for these factors.

OBJECTIVE #2: MINIMIZE DISPOSAL OF COLLECTED HHW THROUGH DISTRIBUTION OF REUSABLE MATERIALS AND HHW RECYCLING

Evaluation Method 1 - Each type of HHW diverted for recycling will be tracked to determine the total amount of waste recycled. The data will be included in annual reports.

Evaluation Method 2 - The types and amounts of HHW redistributed to non-profit groups and public agencies will be recorded for inclusion in annual reports.

Evaluation Method 3 - The amount of HHW redistributed to residents at HHW events will be recorded for inclusion in annual reports.

OBJECTIVE #3: IMPROVE MONITORING AND EVALUATION OF HHW PROGRAMS

Evaluation Method 1 - At the end of the first year of operation, the new measurement method will be evaluated by participating cities and agencies.

OBJECTIVE #4: LIMIT IMPROPER DISPOSAL OF HAZARDOUS WASTE AT SOLID WASTE LANDFILLS BY CONTINUING STATE-MANDATED HAZARDOUS WASTE EXCLUSION PROGRAMS

Evaluation Method 1 - The Department of Environmental Health Services' annual reports on the hazardous waste exclusion program will be included in the annual HHW program reports.

Evaluation Method 2 - The quantities of HHW discovered in the load checking program will be charted in order to monitor increases or decreases from previous years.

OBJECTIVE #5: INCREASE EFFICIENCY AND EFFECTIVENESS OF HHW COLLECTION SERVICES AND PUBLIC EDUCATION BY COORDINATING PROGRAMS WITH OTHER JURISDICTIONS AND AGENCIES WHENEVER FEASIBLE

Evaluation Method 1 - Annual surveys of participating city officials will be done to determine overall level of satisfaction and to identify problems in the collection and public education programs.

Evaluation Method 2 - Annual surveys of agencies and organizations involved in the countywide HHW program will be done to assess satisfaction with the cooperative HHW collection and public education efforts.

OBJECTIVE #6: DECREASE POTENTIAL SHORT- AND LONG-TERM LIABILITY RISKS BY MONITORING ENVIRONMENTAL COMPLIANCE RECORDS AND PROOF OF INSURANCE OF CONTRACT WASTE HAULERS AND CONTRACT TREATMENT, STORAGE AND DISPOSAL FACILITIES

Evaluation Method 1 - An environmental compliance file will be maintained for each hazardous waste management and recycling firm utilized by the program. The file will be reviewed and updated annually to include environmental compliance records, results of on-site audits; and proof of liability insurance. A summary of these activities will be included in the annual reports.

OBJECTIVE #7: INCREASE SOURCE REDUCTION OPTIONS FOR RESIDENTS BY SUPPORTING LEGISLATIVE EFFORTS AIMED AT DEVELOPMENT OF SAFER PRODUCTS AND SAFER HHW MANAGEMENT METHODS

Evaluation Method 1 - The annual HHW management report will include a summary of legislative efforts sponsored or endorsed by participating cities and the County for the unincorporated area.

7.2 METHODS TO QUANTIFY AND MONITOR ACHIEVEMENT OF MEDIUM-TERM PLANNING PERIOD OBJECTIVES

OBJECTIVE #1: CONTINUE THE OBJECTIVES DEVELOPED FOR THE SHORT-TERM PLANNING PERIOD INTO THE MEDIUM-TERM PLANNING PERIOD

Evaluation Method 1 - The evaluation methods described above for the short-term planning period objectives will be continued into the medium-term planning period.

OBJECTIVE #2: INCREASE SOURCE REDUCTION EFFORTS

Evaluation Method 1 - At the beginning of the medium-term planning period, additional strategies for promoting source reduction will be considered.

7.3 WRITTEN CRITERIA FOR EVALUATING PROGRAM'S EFFECTIVENESS

The County HHW Program will prepare annual reports describing the findings of the evaluation outlined above. Also included in the reports will be city-specific data for each jurisdiction participating in the program. For each city, the total amount of HHW diverted; amount recycled; number of residents utilizing the programs; amount recycled; and cost per ton, yard, or drum to divert HHW; will be included. When future waste characterization studies are done, the amount of HHW remaining in the waste stream will be included.

Additional information describing the markets for recyclable HHW materials will be included in the annual report. The markets for recyclable materials will be monitored to determine if additional markets are necessary or if additional materials can be sent for recycling.

The annual report will also include an overall evaluation of the adequacy of the HHW collection services. Increases in demand for services and increases in population will warrant adjustments in the operating schedule of the mobile collection unit and the permanent facility. In addition, under-utilization in specific communities or neighborhoods will be examined and addressed.

7.4 RESPONSIBLE PARTIES FOR MONITORING, EVALUATION, AND REPORTING

The Town of Los Altos Hills' Public Works Department, the Santa Clara County Solid Waste Program, and the County Department of Environmental Health Services will monitor and evaluate the HHW Program described above. In the Town of Los Altos Hills, the Department of Public Works will oversee city HHW programs, and will participate in the countywide HHW planning, implementation, monitoring, and reporting activities. The County Solid Waste Program intends to assist in preparation of annual reports on the Countywide HHW program. Due to the limited staffing in the Town, the County will be looked upon to take the lead in preparation of the required reporting. The Department of Environmental Health Services will implement and monitor the mobile and permanent facility collection activities as well as the landfill load checking programs.

7.5 FUNDING REQUIREMENTS FOR MONITORING AND EVALUATION

Monitoring and evaluation of HHW management in the Town of Los Altos Hills will be funded through monies from the Solid Waste Fund, which obtains its revenue from franchise and disposal fees. The County Solid Waste Program budget includes funding for administrative activities such as record-keeping, monitoring recyclable materials markets, tracking the demographics of participants utilizing the program, and annual report-writing. The County Environmental Health Department's HHW and landfill load checking programs include recording keeping and reporting procedures.

7.6 CONTINGENCY MEASURES

If the programs described above fail to meet the goal of diverting HHW from landfill disposal, the following tasks can be implemented:

- Analyze existing programs for obstacles to successful implementation
- Increase or improve education and advertising efforts
- Increase the number of sites for the mobile collection unit
- Increase the hours of operation at the permanent facility and mobile collection unit
- Increase funding and staff
- Modify objectives
- Revise the implementation schedule for permanent facility
- Increase enforcement efforts
- Increase penalties for improper disposal
- Increase frequency of program monitoring and review

CHAPTER 8

EDUCATION AND PUBLIC INFORMATION

8.1 OBJECTIVES FOR SHORT- AND MEDIUM-TERM PLANNING PERIODS

OBJECTIVE #1: INCREASE RESIDENTS' AWARENESS OF SOURCE REDUCTION, SAFER USE AND PROPER DISPOSAL OF HHW

Multi-jurisdictional and City Sponsored Education and Public Information Programs

The Town of Los Altos Hills will participate in public education programs which will be coordinated by the Countywide HHW Program. The Countywide HHW Program will coordinate public education efforts with the Nonpoint Source Pollution Control Program, the wastewater treatment plants' source reduction programs, the school science education curriculums, and non-profit educational organizations.

The Town of Los Altos Hills will provide information to residents regarding the city-sponsored HHW programs.

Source Reduction

Residents will be informed of the availability of less or non-hazardous substitutes. The need for public support for development of products which do not result in the generation of household hazardous waste will be included in public education materials.

Proper Use and Storage

Residents will be informed about the hazardous nature of some products and methods for proper use and storage of such products.

Proper Disposal

Residents will be informed of the environmental hazards associated with improper disposal of HHW, and will receive guidance on proper disposal methods.

OBJECTIVE #2: INCREASE THE ACCURACY AND UNIFORMITY OF HHW SOURCE REDUCTION AND DISPOSAL PUBLIC INFORMATION DISSEMINATED BY PUBLIC AGENCIES

Training for Use of Guidebook

Employees of public agencies and organizations in Santa Clara County who respond to public inquiries regarding HHW will be eligible to participate in training on the use of the "Guidebook for Proper Management of Household Waste for the Protection of Our Local Environment". The Guidebook will be distributed to approximately 250 agencies and organizations in the Spring of 1991.

Guidebook Updates

The County Hazardous Waste Planning staff will oversee updates/supplements of the manual as necessary.

8.2 EXISTING EDUCATION AND PUBLIC INFORMATION PROGRAMS

Town-Sponsored Education Efforts

The Town of Los Altos Hills has sponsored educational efforts to inform residents of proper disposal methods of HHW. In addition, residents have received guidance on how to generate less hazardous waste by using less- and non-hazardous alternatives. These efforts include:

- Publication and distribution of the "Take Me Shopping-A Consumer Guide To Safer Alternatives For Household Hazardous Products," as well as "The Bay Begins At Your Front Door" Approximately 2,500 copies of each were presented by the city to residents in 1990.
- Phone inquiries from residents regarding HHW disposal and alternative products are routinely answered by Town staff and the Town-franchised waste hauler.
- As advertising for upcoming collection events, the following methods were used:
 - Messages in utility bills
 - Advertisements and articles in local newspapers

In 1990, the League of Women Voters sponsored the production and distribution of a video entitled "Cleaning Up Toxics at Home." The League distributed copies of the video to 16 libraries, 15 city governments, the County Hazardous Waste Management Program, 7 junior colleges, 3 universities, and 8 prenatal education groups in Santa Clara County.

The League also printed and distributed 4000 copies of "Take Me Shopping", as well as a flyer entitled "Cleaning Up Toxics", in 1990.

Nonpoint Source Pollution Control Program

In 1988, the Town of Los Altos Hills joined the Nonpoint Source Pollution Control Program, a project of the Santa Clara Valley Water District. Nonpoint source water pollution refers to pollutants which run-off from broad areas of land rather than enter the water through a discrete pipe or conduit. The purpose of the Nonpoint Source Program is to reduce stormwater-borne pollutants entering the southern San Francisco Bay. Specific pollutants of concern, in order of priority, are heavy metals (cadmium, copper, lead, mercury, nickel, silver, and selenium); hydrocarbons (contained in oil and grease); pesticides and herbicides; suspended sediments; and organic pollutants.

The Nonpoint Source Program Public Information/Participation Plan aims to inform the public about the causes and origins of nonpoint source pollution, to explain the correct practices for controlling pollutants at their source, and to involve the active support of the public in implementing these practices. The Nonpoint Source Program aims to reduce improper disposal of HHW into nonpoint pathways and at the same time discourage disposal of HHW into the solid wastestream.

In 1991, the Nonpoint Source Program began its public educational efforts with publication of a brochure entitled "The Bay Begins at Your Front Door!" The brochure explains how residents can prevent pollution of the San Francisco Bay by keeping hazardous materials from entering the storm drain system. The Nonpoint Source Control Program plans to distribute this brochure and several pollutant specific brochures focusing on motor oil and pesticides. Additional educational programs are under development.

Wastewater Treatment Plants

The Palo Alto Regional Water Quality Control Plant, located in the City of Palo Alto, serves the Town of Los Altos Hills. Since 1990, the Plant has sponsored a special public education effort aimed at reducing the accumulation of silver in the San Francisco Bay. Residents are urged to deliver spent photographic fixer and other HHW to a household hazardous waste collection event.

Santa Clara County Hazardous Waste Management Plan (Tanner Plan)

The Santa Clara County Tanner Committee developed the following three public education policies for management of HHW. The Plan was formally approved by the Town of Los Altos Hills and will be adopted by the Town upon approval of the Plan by the State Department of Health Services.

PUBLIC EDUCATION POLICY #1: "The County and Cities shall coordinate the development of a program for the proper management and disposal of household hazardous waste on a countywide basis in accordance with the waste management hierarchy and considering existing programs and conditions."

This policy resulted in the formation of the Household Hazardous Materials Working Group. The Working Group is composed of representatives from each of the cities; County hazardous waste, solid waste and environmental health staff; private solid waste contractors; and community advisory members. The Working Group conducted a thorough evaluation of HHW management alternatives. This evaluation resulted in a decision to implement a pilot countywide HHW collection and public education program in fiscal year 1991-1992. The evaluation of HHW management alternatives and a description of the selected program are included in this document.

PUBLIC EDUCATION POLICY #2: "The County, in coordination with the Cities, shall initiate a public education campaign which will inform all county residents about the potential hazards associated with household products, how to dispose of them safely, and safe substitute products and practices that can be used in place of hazardous substances."

Several educational publications have been produced: "Take Me Shopping - A Consumer Guide To Safer Alternatives For Household Hazardous Products" and "The Guidebook for Proper Management of Hazardous Wastes". Additional countywide educational activities are currently under development and are described in detail in this document.

PUBLIC EDUCATION POLICY #3: "The County, in coordination with the Cities and industry, shall engage in direct public education concerning hazardous waste reduction and management such as workshops, utilization of the media, school programs, and information dissemination."

As a result of this policy, industry-specific waste minimization workshops have been held in the county. Workshops for the metal finishing industry and the automotive service industry provided up-to-date waste minimization and regulatory compliance information to over 500 local businesses as of March 15, 1991. In addition, one jurisdiction is working with its local industry in developing a pilot educational program to provide waste minimization information to all types of hazardous waste generators. Business and industry associations are also participating in these efforts. In addition, an effort to coordinate hazardous waste public education programs with local schools is underway, and includes the participation of several local community colleges.

8.3 IMPLEMENTATION OF EDUCATION AND PUBLIC INFORMATION PROGRAMS IN THE SHORT- AND MEDIUM-TERM PLANNING PERIODS

8.3.1 Program Description

Countywide Efforts

The Town of Los Altos Hills plans to participate in the educational efforts coordinated by the Countywide HHW Program. Residents will be informed about how to use, store, and dispose of household hazardous waste properly. An aggressive source reduction component will be included to promote less hazardous alternatives and thereby reduce generation of HHW.

The Countywide HHW Program will coordinate educational efforts with participating cities, non-profit organizations, and public agencies such as the Nonpoint Source Control Program, wastewater treatment plants, and local schools.

Town Efforts

The public education efforts currently underway in the Town are described above under "Existing Conditions." It is anticipated that these Town-sponsored programs will be continued into the short- and medium-term planning periods. A summary of public education activities to be carried out in the short- and medium-term planning period follows.

- Printing and Distribution of "Take Me Shopping" at HHW events and upon request
- Use of "The Guidebook for Proper Management of Hazardous Wastes"
- Advertising in local papers
- Nonpoint Source Public Education brochures

8.3.2 Agencies Responsible for Implementation of Education and Public Information Program

The Public Works Department is responsible for oversight of the HHW education and public information programs in the Town of Los Altos Hills. The Director of Public Works will be the liaison between the Town and the Countywide HHW Program and will participate in education and public information activities as they pertain to the Town.

The County Department of Planning and Development will serve as the lead agency for public education. The Planning Department will coordinate the educational efforts with participating cities, County Environmental Health, Santa Clara Valley Water District, the wastewater treatment facilities, schools, and non-profit agencies.

8.3.3 Implementation Tasks

The following Public Education tasks were defined for the Town of Los Altos Hills.

Task	Date
-Develop and Distribute Event Advertising Notices	1991, ongoing
-Develop and Distribute "The Guidebook" to Public Agencies	1991
-Provide Training for Staff using "The Guidebook"	1991-1992
-Review and, If Needed, Update "The Guidebook" annually	annually
-Reproduce and Distribute the "Take Me Shopping" booklet	1991, ongoing
-Establish County HHW Telephone Information/Appointment Line	1991
-Participate in Ongoing Multi-Agency HHW Public Education Efforts	1991, ongoing
-Develop and Disseminate Source Reduction and Product Specific Information Messages	1991, ongoing

8.3.3 Costs and Sources of Funding for Implementation of Education and Public Information Programs

Public Information

Each Town participating in the Countywide HHW Program will pay for services on a per-vehicle basis. The cost of publicizing the mobile and permanent facility services was included in the \$90 - \$110 per vehicle cost. Funds for serving Los Altos Hills residents will come from garbage surcharge fees.

Education

The budget for implementing education programs is currently under development. The Countywide HHW Program is coordinating its educational efforts with participating cities, public agencies, and non-profit organizations.

The Town's HHW education and public information programs are anticipated to cost between \$500 and \$2500 each year. Funding sources for these programs will come from solid waste disposal and franchise fees.

8.4 MONITORING AND EVALUATION

8.4.1 Evaluation Methods

The methods described below will be used to measure achievement of the education and public information objectives.

OBJECTIVE #1: INCREASE RESIDENTS' AWARENESS OF SOURCE REDUCTION, SAFER USE, AND PROPER DISPOSAL OF HHW

Evaluation Method 1 - Annual surveys of residents will be done to determine the extent to which buying habits have changed to reduce generation of HHW; and the percent of residents aware of safe use and disposal practices. Results of the surveys will be included in the annual reports. When possible, changes in purchasing behavior may also be monitored using locally-obtained retail sales data or regional marketing data.

Evaluation Method 2 - The number of participants and geographic distribution of participants will be analyzed to determine the adequacy of HHW program advertising efforts.

Evaluation Method 3 - Based on the business licenses issued by the Town, an annual survey of retail businesses will be done to monitor availability of less-hazardous alternatives to specific products.

Objective #2: INCREASE THE ACCURACY AND UNIFORMITY OF HHW SOURCE REDUCTION AND DISPOSAL PUBLIC INFORMATION DISSEMINATED BY PUBLIC AGENCIES

Evaluation Method 1 - The Town will, on an annual basis, distribute copies of the "Guidebook for Proper Management of Household Waste for the Protection of Our Local Environment" to public and non-profit agencies and request response to determine level of satisfaction and need for changes.

Evaluation Method 2 - Periodic updates of the Guidebook will be done to accommodate changes in HHW management.

8.4.2 Written Criteria for Evaluating Program Effectiveness

The County HHW Program, in conjunction with the Town of Los Altos Hills will prepare annual reports describing the findings of the evaluation outlined above. Education and public information programs will be evaluated to determine changes in purchasing habits, level of awareness of proper use and disposal, level and distribution of participation, and changes in availability of less-hazardous products. Criteria for evaluating the Guidebook include level of satisfaction among users and a determination regarding the need for revision.

8.4.3 Agencies Responsible for Monitoring, Evaluation and Reporting

The agencies responsible for monitoring, evaluation and reporting include the Department of Public Works of the Town of Los Altos Hills, the County Division of Environmental Health Services, and the County Department of Planning and Development.

8.4.4 Funding Requirements and Sources for Monitoring and Evaluation

Monitoring and evaluation of HHW management in the Town of Los Altos Hills will be funded through the Solid Waste Fund. The County Solid Waste Program budget includes funding for administrative activities such as record-keeping, monitoring recyclable materials markets, tracking the demographics of participants utilizing the program, and annual report-writing. The County Environmental Health Department's HHW duties include record keeping and reporting procedures.

8.4.5 Contingency Measures

In the event that the annual evaluations indicate a shortfall in attainment of the education and public information objectives, the following measures may be implemented.

- Analyze existing programs for obstacles to successful implementation
- Increase or improve education and advertising efforts
- Increase funding and staff
- Modify objectives
- Increase frequency of program monitoring and review

8.4.6 Program Monitoring and Reporting Schedule

Annual reports will be written and distributed at the end of each 12 months of operation. It is anticipated that the first annual report will be written in October, 1992.

CHAPTER 9

FUNDING

9.1 PROGRAM COSTS AND ALLOCATION OF RESOURCES

Cost estimates for programs scheduled for implementation, as well as revenue sources to support these programs, are contained in Table 6.2 in Chapter 6 of this element. In addition, more detailed descriptions of estimated program costs are contained in Chapter 4, Evaluation of Household Hazardous Waste Management Alternatives.

9.2 CONTINGENCY FUNDING

In the event that adequate funding is not available from the revenue sources identified in Table 6.2, the Town of Los Altos Hills may consider new or additional garbage surcharge fees, landfill tipping fees, or advance disposal fees.

Attachment 1

Section 25117 of the Health and Safety Code

Attachment 1 Section 25117 of the Health and Safety Code

25117. (a) "Hazardous waste" means either of the following:

(1) A waste, or combination of wastes, which because of its quantity, concentration or physical, chemical, or infectious characteristics may either:

(A) Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

(B) Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(2) A waste which meets any of the criteria for the identification of a hazardous waste adopted by the department pursuant to Section 25141.

(b) "Hazardous waste" includes, but is not limited to, RCRA hazardous waste.

Attachment 2

HHW Collection Information

Form 303 Household Hazardous Waste Collection Information

Purpose of this form

This form is to be completed by each jurisdiction in California that is required by the California Integrated Waste Management Board to report information annually about the collection of household hazardous waste. This form is specifically intended to fulfill reporting requirements of the Household Hazardous Waste Element of the Countywide Integrated Waste Management Plans.

The completed form for the previous fiscal year ending June 30 is due on the first Monday of October.

Instructions

Detailed instructions have been written to help you complete this form. Please refer to the instructions titled "Instructions for Completing Form 303 Household Hazardous Waste Collection Information" on pages 3 through 5.

Send to

Household Hazardous Waste Section
California Integrated Waste Management
8800 Cal Center Drive
Sacramento, CA 95826

A. Jurisdiction

Reporting Source
Address
City/State/Zip
Contact Person
Phone
Location of event

City of Los Altos Hills
26379 Fremont Road
Los Altos Hills, CA 94022
Jeff Peterson
(415-941-7222

B. Sponsors

(Check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> County | <input type="checkbox"/> Contractor |
| <input checked="" type="checkbox"/> City | <input type="checkbox"/> Joint (public/private) |
| <input type="checkbox"/> Private company | <input type="checkbox"/> Non-profit group |
| <input type="checkbox"/> Other _____ | |

C. Report Period

Start date (mm/dd/yy)
End date (mm/dd/yy)

D. Program Type

(Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Permanent | <input type="checkbox"/> Mobile |
| <input type="checkbox"/> Periodic (Temporary) | <input type="checkbox"/> Recycle only program |
| <input type="checkbox"/> Other _____ | |

E. Location

(Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> One site | <input type="checkbox"/> At a transfer station |
| <input type="checkbox"/> Multiple sites | <input type="checkbox"/> On city property |
| <input type="checkbox"/> Curbside | <input type="checkbox"/> On county property |
| <input type="checkbox"/> At a sanitary landfill | <input type="checkbox"/> On private property |
| <input type="checkbox"/> Other _____ | |

F. Participation

Number of participants
Number of days open
Operating times each day
Population of service area

	participants
	days
Opening time	Closing time
	people

G. Waste Volumes Collected

		Actual Weight (in pounds)	Number of drums shipped	Management Method(s) Include percentage if more than one method was used
1. Flammable & Poison	Flammable solid/liquid			
	Bulked flammable liquids			
	Oil-base paint			
	Poison (excl. aerosols)			
	Reactive and explosive			
	Subtotal			
2. Acid	Inorganic acid			
	Organic acid			
	Subtotal			
3. Base	Inorganic base			
	Organic base			
	Subtotal			
4. Oxidizer	Neutral oxidizers			
	Organic peroxides			
	Oxidizing acid			
	Oxidizing base			
	Subtotal			
5. PCB-containing	PCB-containing paint			
	Other PCB waste			
	Subtotal			
6. Aerosol	Corrosive aerosols			
	Flammable aerosols			
	Poison aerosols			
	Subtotal			
7. Reclaimable	Antifreeze			
	Car batteries			
	Fluorescent bulbs			
	Latex paint			
	Motor oil/oil products			
	Oil filters			
	Mercury (metallic)			
	Subtotal			
8. Other	Medical waste			
	Household batteries			
	Other			
	Subtotal			
9. Asbestos	(cubic yards)			
10. Grand Total	(excluding asbestos)			

Attachment 3

Board Transmittal Authorizing Countywide HHW Program

County of Santa Clara
Health Department

RECEIVED
FEB 11 1991



100 Moorpark Avenue
San Jose, California 95128

COUNTY OF SANTA CLARA
OFFICE OF TOXICS AND SOLID WASTE
MANAGEMENT

Prepared by: Isao Kobashi ^{IK}
Erwin Koehler ^{ik}

Reviewed by: Lee Esquibel ^{LE}
Delia B. Alvarez

Submitted by: J. Kennedy Bartholet

February 7, 1991

TO: Sally Reed, County Executive

FROM: J. Kennedy Bartholet, Health Services Administrator

SUBJECT: Countywide Household Hazardous Waste Collection Program

RECOMMENDED ACTION

It is recommended that the Board of Supervisors:

Approve the concept of a Countywide Household Hazardous Waste Collection Program, including provision of services to unincorporated residents.

Authorize the County Division of Environmental Health Services to administer a Countywide Household Hazardous Waste (HHW) Pilot Collection Program for the first year of operations and to administer any on-going Program resulting from the Pilot Countywide HHW Program.

FISCAL IMPLICATIONS

- No monies from the County General Fund would be required.
- Participating cities would pay their proportional share of Program costs based on the services provided to their residents.
- Funds for serving county unincorporated residents would come from garbage surcharge fees.

Attachment 4

Memorandum of Understanding
Between County of Santa Clara and
Town of Los Altos Hills

RECEIVED

FEB 13 1992

TOWN OF LOS ALTOS HILLS

AGENCY AGREEMENT FOR COUNTYWIDE
HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM

This Agreement is made by and between the Town of Los Altos Hills
(City) and County of Santa Clara (County) on the 30th day
of October, 1991.

RECITALS

A. The County Board of Supervisors has approved a one year pilot Countywide Household Hazardous Waste Collection Program whereby residents of the county and participating jurisdictions will have an opportunity to safely dispose of household hazardous wastes on an appointment or emergency basis regardless of the specific location at which an event has been scheduled.

B. The participating jurisdictions desire to provide residents with convenient opportunities to safely dispose of their household hazardous waste in order to encourage the proper disposal of toxic products and avoid unauthorized or improper disposal in the garbage, sanitary sewer, storm drain system, or on the ground, in a manner which creates a health or environmental hazard.

C. The participating jurisdictions desire to provide a safe, convenient, and economical means for the residents of Los Altos Hills, and residents of unincorporated County areas to dispose of household hazardous wastes. These wastes include, but are not limited to, common household products such as household cleaning products, spot remover, furniture polish, solvents, oven cleaner, insecticides, oil base paints, motor oil, antifreeze and car batteries. Residents of the areas listed above will be eligible to bring household hazardous wastes to a household hazardous waste collection event where these wastes will be accepted for proper disposal as described below.

D. The participating jurisdictions desire to schedule Household Hazardous Waste Collection Events during fiscal year 91-92.

NOW, THEREFORE, the Town of Los Altos Hills and COUNTY OF SANTA CLARA AGREE AS FOLLOWS:

1. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which each of the jurisdictions will participate in the Household Hazardous Waste Collection Program (Program) available to the residents of the City of Town of Los Altos Hills, residents of County unincorporated areas, and residents of other participating jurisdictions.

2. SERVICES PROVIDED BY COUNTY

The County shall conduct Household Hazardous Waste Collection Events (Events) at various sites located in Santa Clara County. The County shall obtain all necessary permits and licenses and shall provide or secure the services of properly trained personnel, hazardous waste haulers, equipment, and supplies to properly receive, package, label, haul, recycle and dispose of the residential hazardous wastes collected at Events. Insurance requirements for transporters and hazardous waste treatment or disposal services shall have the following minimum limits: General Comprehensive--\$1 million per occurrence, \$2 million aggregate; Auto--\$1 million; workers comp.--statutory limits established by law; and environmental impairment liability --\$1 million per occurrence, \$2 million aggregate. Other services to be provided by the County include establishing and operating a telephone hotline to schedule appointments for the Events and to provide information about household hazardous materials. The telephone hotline shall be operated 5 days a week, Monday through Friday, from the hours of 8:30 a.m. to 4:30 p.m., excluding holidays.

County intends to schedule Events during four collection periods as indicated in Attachment A, "Preliminary Schedule For Mobile HHW Collection Events".

3. ROLE OF CITY

A. Scheduling: The City shall work with the County to determine the date(s) of the Events. Although every effort will be made to accommodate City requests to schedule an Event on specified dates, County shall determine the final dates if there are conflicting requests from Cities participating in the Program.

B. Site Selection: The City shall coordinate with the County in locating and securing sites for the Events. It is recognized that

some of the cities participating in the Program may not have appropriate sites available.

4. WASTES NOT ACCEPTED

Certain hazardous waste materials shall not be accepted for collection and disposal. These include compressed gas cylinders, radioactive materials, and explosives. Other wastes not accepted are wastes produced in the course of operating a business, including a business operated out of a house.

5. TRACKING OF WASTES ACCEPTED

Following each collection period, the County will provide a report to the City regarding the types and quantities of Household Hazardous Waste accepted by the Program. The report will include the amount of waste diverted for reuse or recycling, the waste management method for each waste stream and associated costs for transportation and disposal.

It will be assumed for billing and reporting purposes that each city is contributing to the waste stream proportional to the number of residents served. The County will sample the types and quantities of waste contributed by residents of each jurisdiction to study the equity of sharing program costs based on an average per vehicle fee. A report on the results of the sampling will be provided to each city as part of a final Program report.

6. ADVERTISING/PUBLIC INFORMATION

The parties shall cooperate to inform the public of the Program and schedule. Each party shall be primarily responsible for advertising the availability of the Program within its jurisdiction.

7. COLLECTION APPOINTMENT SYSTEM

A. Scheduling Options: The County shall establish a "Hotline" to schedule appointments for Events. Three options are available for scheduling:

1. All applicants screened by city representatives prior to scheduling a Program appointment;
2. Allotted appointment evenly distributed throughout the year and County makes all appointments;
3. Appointment scheduled as residents call "Hotline", City notified when indicated participation limit is approached.

City elects option 3 as its choice in utilizing the "Hotline" services for scheduling appointments.

B. Reservation of Appointments for City residents: Each city or combination of cities that have previously sponsored household hazardous waste collection events shall have 75% of the planned appointments reserved for residents of the area in which the Event is scheduled. The appointments will be reserved by the County for up to three (3) weeks before the Event. After this time all remaining appointments may be filled by residents of other jurisdictions.

8. CITY FUNDING COMMITMENT

City agrees to commit up to \$10,000 (ten thousand dollars) to the Program during FY91-92 to enable the County to serve 100 households from City at an average cost of \$100 per car.

9. COST OF PROGRAM

A. Start-Up Costs: Start Up Costs are defined as the cost of equipment purchases needed to begin the Program. Start-Up Costs to each of the participating jurisdictions shall be a one time fee of \$.025 per-household within its jurisdiction. For non-census years, household population shall be determined by the State Department of Finance, Demographic Research Unit. Any city that joins the Program after the first year shall be required to pay a start-up cost of \$.025 (annually adjusted for inflation) per household within the city. The Start-Up cost per household shall be adjusted as of July 1, 1992 and annually thereafter to reflect changes in the San Francisco-Oakland-San Jose Metropolitan Area Consumer Price Index (All Urban Consumers; 1982-84 = 100) compiled and published by the United States Department of Labor, Bureau of Labor Statistics.

City Start-Up Costs are \$120.00 .

B. Event Costs (permits, licenses, service and supplies, transportation and disposal): The Event Costs shall be initially set at a flat per vehicle fee of \$100 per household that shows up at an event regardless of the quantity, volume, quality, or character of the hazardous waste collected from a resident, within the limits set forth herein. The Program will accept household hazardous wastes, within the limits set forth herein, from households who come to an

event without an appointment. The jurisdiction from which the households who come to an event without an appointment will be charged the same per vehicle rate as regular appointments.

C. **Actual Average Cost:** The County will provide City with interim cost reports following each collection period (October-December, January-February, March-April, May-June). If the interim cost reports show Event Costs are greater than projected, future Event Costs shall be adjusted to reflect this higher cost and fewer households will be served or City may elect to increase its financial commitment to the Program. If costs are less than projected, the City may elect to receive credit for a continuing program or a refund after final program costs have been computed. At the end of the fiscal year, actual costs of providing service will be used to calculate the final average per vehicle cost.

10. PAYMENT TO COUNTY

The City shall pay County for Start-up Costs and Event Costs as follows:

A. **Start-Up Costs:** County will compute each participating city's Start-Up Costs. Start-Up Costs are due within 30 days from the date of this Agreement.

B. **Event Costs:** Payments for Event Costs are due in four (4) equal installments. Each jurisdiction will be billed 25% of its total financial commitment to the Program as identified in Paragraph 8 (A) of this document. Payment for the first collection period is due within 30 days from the date of this Agreement. The County will invoice the City 30 days before each of the subsequent collection periods. Payment for subsequent collection periods will be due on January 1, 1992, March 1, 1992, and May 1, 1992.

11. ACCOUNTING

The County shall employ means to verify the place of residence of all participants in the Program and provide a record to the City of its participating residents within two weeks following the collection period.

12. TERM OF AGREEMENT

This Agreement shall be effective upon signing by both City and County and shall remain in full force and effect until terminated by any party hereto upon thirty (30) days written notice to each of the other parties or until midnight June 30, 1992, whichever comes

first. This Agreement may be extended from year to year upon written agreement of County and City.

13. HOLD HARMLESS AND INDEMNIFICATION

County shall indemnify, hold harmless, and defend City, its officers, agents, and employees with respect to any loss, damage, liability, cost or expenses, including attorney's fees, arising from failure to comply with any provision of this Agreement by County and/or its subcontractors or arising from performance of any of the work or providing any of the services under this Agreement, including negligent acts, except as required by the special provisions in the following paragraph.

City shall indemnify County for its apportioned share of any liability incurred and attributed to the Program for the transportation, treatment, or disposal of the household hazardous waste, once the waste has been accepted by a licensed hazardous waste hauler. Apportionment for disposal liability shall be determined by the City's pro rata proportion of household participation in the Program. Apportionment for transportation and treatment liability shall be determined by the City's pro rata household participation at the event where the waste was generated. Unless there is no primarily responsible party, no liability shall be apportioned to the City unless the resources (including insurance) of any primary responsible hauler or responsible disposal facility operator are insufficient or unavailable to pay the necessary cost of remediation.

14. NOTICES

All notices and communications herein required shall be in writing to the other party as follows, unless expressly changed in writing:

City of Town of Los Altos Hills

City Manager

City of _____

Santa Clara County

Lee Esquibel, Director
Environmental Health
Department of Public Health
County of Santa Clara
2220 Moorpark Avenue
San Jose, CA 95128

IN WITNESS WHEREOF, the parties have executed this Agreement.

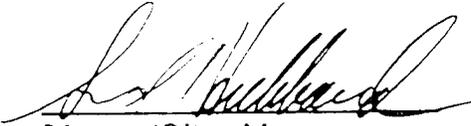
"CITY"

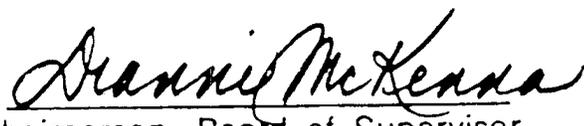
"COUNTY"

CITY OF Los Altos Hills
a municipal corporation.

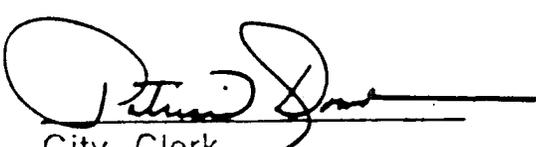
COUNTY OF SANTA CLARA, a political
subdivision of the State of California.

By:

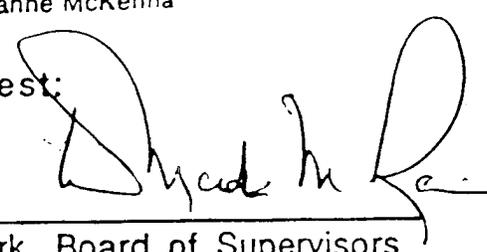

Mayor/City Manager


Chairperson, Board of Supervisor
Dianne McKenna

Attest:


City Clerk

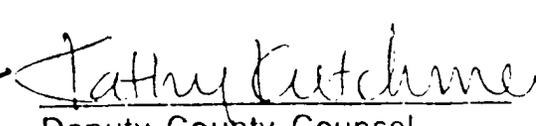
Attest:


Clerk, Board of Supervisors
DONALD M. RAINS

APPROVED AS TO FORM:

APPROVED AS TO FORM AND LEGALITY:


City Attorney


Deputy County Counsel

ATTACHMENT A

ENVIRONMENTAL HEALTH OFFICE OF TOXICS ENFORCEMENT
PRELIMINARY SCHEDULE FOR MOBILE HHW COLLECTION EVENTS*

JURISDICTION	(400 CAR EVENTS) Oct-Dec	(400 CAR EVENTS) Jan-Feb	(600 CAR EVENTS) Mar-Apr	(600 CAR EVENTS) May-Jun	Total
West Valley (1260) Campbell (250) Los Gatos (400) Monte Sereno (110) Saratoga (500)	1	1	1	0	3
North County (2000) Cupertino (300) Los Altos (600) Los Altos Hills (100) Mountain View (1000)	1	1	1	1	4
San Jose (3900)	1	2	2	3	8
Milpitas, Sunnyvale, Santa Clara (1200) Milpitas (500) Santa Clara (100) Sunnyvale (600)	0	1	1	1	3
Unincorporated (1000)	0	0	0	1	1
TOTAL EVENTS	3	5	5	6	19
CARS X EVENTS	(400 X 3) + (400 X 5) + (600 X 5) + (600 X 6) = 9,800				

* A mobile collection event may be have appointments scheduled for two consecutive days in accordance with the proposed Permit by Rule Regulations.

ENVIRONMENTAL ASSESSMENT: CP.91-10
HOUSEHOLD HAZARDOUS WASTE PROGRAM

Background and Project Description:

The County proposes to establish a County-wide Household Hazardous Waste Program to be operated by the County Health Department. This program will integrate efforts by individual cities, and will serve all residents of the County.

To date, the existing household hazardous waste programs have been run by cities for residents within their city limits, and have consisted of occasional collection days at central drop-off points. The County-wide plan will be available to all residents of the County who live in both incorporated and unincorporated areas. Mobile collection points will be located at neighborhood sites, and the facilities will be rotated to new sites on a regular basis.

Service for the drop-off collections will be available on an appointment-only basis to avoid unnecessary waiting time for customers, and residents will have a choice of using either the most convenient date or the most convenient location for their drop-off collections. To encourage residents to use the service, the program aims to schedule at least three mobile drop-off collections at a site located within a 20 minute commute distance of all residents' homes during the one-year pilot program.

The household hazardous waste will be sorted, and material suitable for reuse or recycling will be separated and taken out of the waste stream. This material will be made available to local non-profit organizations and agencies, and to qualified recycling contractors.

Environmental Assessment:

1. Availability of drop-off collection points will reduce the amount of toxic substances dumped in landfills, storm drains, sewers and vacant land.
2. A re-use program will reduce the volume of material sent for disposal by 15%. Re-useable material will be made available to nonprofit groups and public agencies.
3. A recycling program will divert an additional 30% of the household hazardous material from the waste stream.
3. The program will be under the jurisdiction of the County Environmental Health Service who will ensure that the program management methods provide for environmentally sound treatment and disposal.
4. An associated public education component of the program will aim to increase awareness of the safe use and disposal of toxic household products, and availability of the service.

Notice of Exemption from CEQA

To: County Clerk
 County of Santa Clara Office of Planning & Research
 1400 Tenth St., Room 121
 Sacramento, CA 95814

Project Title Household Hazardous Waste Program		File Number CP.91-10
Project Location County-wide		APN (s) N.A.
Public Agency Approving Project Board of Supervisors	Person or Agency Carrying out project Santa Clara County Health Dept.	
Project Description (including purpose and beneficiaries of project) Establishment of a county-wide household hazardous waste collection program which will be available to all residents of Santa Clara County. Mobile drop-off collection points will be rotated to neighborhood sites to afford easy access for all County residents. Material will be reused or recycled as appropriate, and the remaining waste will be transported and disposed of in compliance with federal, state and local regulations.		
Exempt Status (check one / Indicate type and State CEQA Guidelines section number):		
<input type="checkbox"/> Statutory Exemption:		
<input checked="" type="checkbox"/> Categorical Exemption: CEQA 15308. Actions by Regulatory Agencies for Protection of the Environment.		
<input checked="" type="checkbox"/> Other: CEQA 15061. General Exemption		
Reasons why project is Exempt: The project is being implemented to protect landfills, groundwater and soil from improper dumping of toxic substances. The project will protect the environment and will have no potential for causing a significant adverse effect.		
County Contact Person Antone Pacheco	Title Program Manager	Telephone Number (408) 299-6930

Date: Aug 13 1991 Signature: Maria Lopez

COMPARISON OF OPTIONS FOR START-UP COSTS FOR THE COUNTY-WIDE HHM PROGRAM

CITY	BASED ON HOUSEHOLDS IN JURISDICTION			START-UP COSTS*	BASED ON INDICATED HHM PROGRAM PARTICIPANTS		
	HOUSEHOLDS IN CITY	% HOUSEHOLDS IN PROGRAM			PARTICIPANTS IN HHM PROGRAM	% PARTICIPANTS IN HHM PROGRAM	START-UP COSTS*
Castroville	15,398	3%		\$360	250	3%	\$360
Castroville	15,046	3%		\$360	300	3%	\$360
Castroville	10,321	2%		\$240	600	6%	\$720
Castroville Hills	2,736	1%		\$120	100	1%	\$120
Castroville	11,805	2%		\$240	400	4%	\$480
Castroville	15,293	3%		\$360	500	5%	\$600
Castroville Bereno	1,201	0.5%		\$60	110	1%	\$120
Castroville View	31,400	6%		\$720	1000	10%	\$1200
Castroville	259,300	52%		\$6240	3900	40%	\$4800
Castroville Clara	38,151	8%		\$960	100	1%	\$1200
Castroville	10,223	2%		\$240	1000	10%	\$1200
Castroville	50,253	10%		\$1200	600	6%	\$720
Castroville Incorporated	33,458	7%		\$840	1000	10%	\$1200
TOTAL	494,585	99.5%		\$11,940	9860	100%	\$12,000

HOUSEHOLDS NOT PARTICIPATING: Gilroy - 9,729, Morgan Hill - 7,961, Palo Alto - 24,948

* ESTIMATED COSTS BASED ON \$12,000 ESTIMATE FOR EQUIPMENT NEEDED TO BEGIN PROGRAM

ENVIRONMENTAL HEALTH OFFICE OF TOXICS ENFORCEMENT
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San Jose (3900)	2	2	3	2	9
Milpitas, Sunnyvale, Santa Clara (1200) Milpitas (500) Santa Clara (100) Sunnyvale (600)	1	1	1	0	3
Unincorporated (1000)	0	0	0	1	1
TOTAL EVENTS	5	5	6	5	21
CARS X EVENTS	$(400 \times 5) + (400 \times 5) + (600 \times 6) + (600 \times 5) = 10,600$				

* A mobile collection event may be have appointments scheduled for two consecutive days in accordance with the proposed Permit by Rule Regulations.