SECTION I
BACKGROUND AND PURPOSE

Chapter 1
INTRODUCTION AND SUMMARY

A. ALAMEDA COUNTY'S HAZARDOUS WASTE MANAGEMENT PLAN: PURPOSE AND APPROACH

PURPOSE

The purpose of the County Hazardous Waste Management Plan is to develop and implement hazardous waste management policies for the management of hazardous waste in Alameda County. The primary focus of the plan is to encourage the reduction of the amount of hazardous waste that is generated in the County to the greatest extent feasible to minimize the number of hazardous waste management facilities that are needed to manage the waste. Alameda County, its cities and special districts will act to provide for the safe, effective management of hazardous wastes generated within the County. As stated in Policy 14, Chapter 2 of this Plan, new offsite hazardous waste management facilities will be primarily limited to a scale necessary to meet the hazardous waste management needs of Alameda County; larger facilities may be permitted in accordance with interjurisdictional agreements reached between Alameda County and other jurisdictions or upon determination of the local governing body that the project meets local planning criteria and serves public needs. Alameda County, its cities, and special districts recognize their collective responsibility to cooperate with other governments in the region and the state in planning for the effective management of hazardous wastes generated in the region and the state in accordance with the hazardous waste management hierarchy described later in this chapter.

Recent state and federal laws mandate the phase-out of land disposal of untreated hazardous wastes over the next few years. Alternative management approaches must be implemented by May 1990, so that land disposal can be ended.

GOALS AND OBJECTIVES

Alameda County's Hazardous Waste Management Plan dated March 1989 was developed by the County Waste Management Authority's Hazardous Waste Committee and an Advisory Committee, with the assistance of a technical consultant, county staff, and the cities. A separate programmatic Environmental Impact Report (EIR) on the plan was prepared to meet the requirements of the California Environmental Quality Act (CEQA). The 1989 Plan was not approved by the California Department of Health Services (DHS) for a variety of reasons. The DHS also rejected the Hazardous Waste Management Plans of 44 other California counties for many of the same reasons.

Alameda County's Hazardous Waste Management Plan has been revised for resubmission to the DHS under the provisions of Assembly Bill 2595 (1990). The revised Plan was prepared by the Alameda County Waste Management Authority's Hazardous Waste Committee, with the assistance

of a technical consultant, the Authority staff, and the cities. To meet the requirements of the California Environmental Quality Act, a Mitigated Negative Declaration has been prepared.

The plan's goals are, first, to protect the public health, safety, and welfare, and environment through eliminating land disposal of untreated hazardous wastes; second, to maintain economic vitality by helping businesses and households reduce production of hazardous wastes and manage their remaining wastes effectively; and third, to reduce the tonnage of hazardous waste generated in the year 2000 by 30 percent from the baseline year of 1989. While there are certain recognized barriers to minimizing the generation of hazardous waste, the economic benefits to the generator and the potential reduction in liability, as well as regulatory incentives and disincentives are expected to result in an estimated 25 to 30 percent reduction in the generation of hazardous waste by 2000. Economic well being and quality of life are related to industrial, commercial, and household activities within the county and also have a relationship to mismanagement of wastes. Waste reduction and waste recycling should be the goal of industry, small business and households. The overall objectives of the planning process include:

- Accepting local responsibility to plan for effective management of hazardous wastes produced by local businesses and households
- Encouraging maximum feasible source reduction
- Involving the public in planning and decisions on facility siting
- Determining local levels of source reduction, and resulting needs for alternative treatment methods and facilities to manage hazardous wastes
- Identifying designated general areas in which hazardous waste facilities might be able to be located, based on siting criteria and local government planning/permitting requirements. Any proposed facility will also be subject to the local land use review process and this Plan does not supersede the local process.
- Encouraging development of needed facilities by the private sector

APPROACH

The Alameda County Hazardous Waste Plan was prepared in response to AB 2948 (Tanner, 1986) which established procedures for preparation of the plan. AB 2948 has three major components: a planning process; a hierarchy of waste management strategies; and a facility siting process.

- The Planning Process requires each county to assess its current hazardous waste stream, and make projections to 2000. Existing waste management approaches and facilities within and outside the county are evaluated, and future needs projected for expanded or new waste management facilities. Special attention is paid to the problems of small quantity waste generators, household hazardous wastes, and waste transportation issues. Each county develops criteria to identify general areas

appropriate for facility locations and involve the public in preparing the county plan and siting criteria.

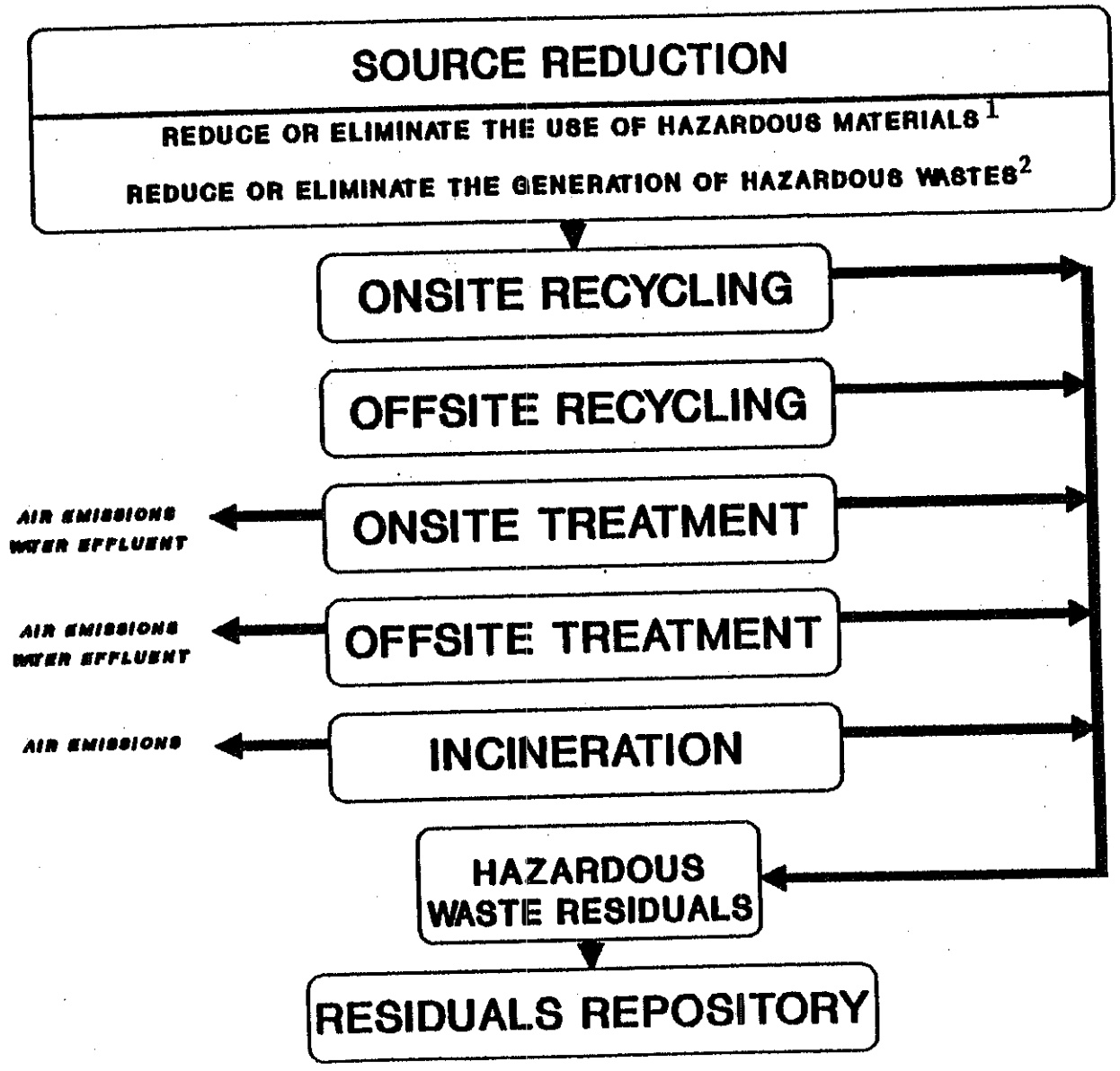
- The plan must be approved by a majority of cities containing a majority of the Population of the incorporated area of the county, by the Waste Management Authority, and by the Board of Supervisors; it must also be approved by the State Department of Health Services. Once approved, the County and all cities must incorporate the Plan into their general plans within 180 days.

- A Hierarchy of Waste Management Strategies is encouraged by AB 2948. Figure 1-1 shows this hierarchy graphically. The hierarchy urges that the first priority be to reduce hazardous wastes during manufacturing (and service and household) activities through the use of fewer hazardous materials, material substitutions, process modifications, and housekeeping measures. Once source reduction has been pursued to the extent technologically and economically feasible, the second priority is to recycle and reuse wastes. Remaining wastes and the residuals left by recycling would then be treated or incinerated. Where hazardous waste is amenable to forms of treatment other than incineration, these other forms of treatment should be given preference over incineration. The treatment residuals not capable of further reduction would be placed in secure land disposal units. No untreated wastes will be placed on or in the land.

- AB 2948 establishes a new Facility Siting Process. Procedures to speed and coordinate the permitting process at the state and local levels are provided. The bill requires that all proposed offsite hazardous waste management facilities, such as new treatment units, be consistent with the Plan's stated goals, policies, and siting criteria. A Local Assessment Committee, supported by a technical consultant, enters into dialogue with a facility developer on behalf of the host community concurrent with the request for a land use permit. Regulations relative to the membership and functions of the Local Assessment Committee are in the California Health and Safety Code (HSC) Section 25199.7. The following quote from HSC 25199.7 shows the functions of the Local Assessment Committee:

Figure 1-1

HAZARDOUS WASTE MANAGEMENT HIERARCHY



1 • Materials Substitution
• Product Substitution

2 • Technology or Equipment
• Improved Plant Operations
• In-process Recycling

"(2) The local assessment committee shall, as its primary function, advise the appointing legislative body of the affected local agency of the terms and conditions under which the proposed hazardous waste facility project may be acceptable to the community. To carry out this function, the local assessment committee shall do all of the following:

(A) Enter into a dialogue with the proponent for the proposed hazardous waste facility project to reach an understanding with the proponent on both of the following:

(i) The measures that should be taken by the proponent in connection with the operation of the proposed hazardous waste facility project to protect the public health, safety, and welfare, and the environment of the city or county.

(ii) The special benefits and remuneration the facility proponent will provide the city or county as compensation for the local costs associated with the operation of the facility.

(B) Represent generally, in meetings with the project proponent, the interests of the residents of the city or county and the interests of adjacent communities.

(C) Receive and expend any technical assistance grants made available pursuant to subdivision (g).

(D) Adopt rules and procedures which are necessary to perform its duties.

(E) Advise the legislative body of the city or county of the terms, provisions, and conditions for project approval which have been agreed upon by the committee and the proponent, and of any additional information which the committee deems appropriate. The legislative body of the city or county may use this advice for its independent consideration of the project."

As discussed in Chapter 9 of this Plan, local government land use decisions on facility proposals may be appealed to a new seven-member state board. If the board finds that the proposed facility would be consistent with the reasonable restrictions contained in the approved Plan, the local decision may be overridden and the facility granted the necessary land use permit.

This plan provides criteria for identifying environmentally suitable locations for needed facilities. The process is intended to reinforce traditions of local home rule, and yet still overcome the "Not in my backyard" (NIMBY) problem. This delicate balance is achieved by encouraging counties to develop appropriate, responsible plans based on equity and local need; to have these plans approved by the State and by the cities in their jurisdictions: and to hold those local jurisdictions accountable through the new Appeal Board for approval of facility siting proposals in environmentally sound locations, consistent with the approved County Plan.

KEY POLICIES DIRECTING THE PROCESS

Plan policies are summarized in this section and described in full in Chapter 2.

- The Plan's top priority is to promote aggressive waste reduction, including reduction in the use of toxic materials. New firms entering the county (or those seeking to expand existing facilities) shall demonstrate how they will comply with the waste management hierarchy as a condition of receiving land use and business permits. All existing hazardous waste generators will be required to implement the hazardous waste management hierarchy to the maximum extent feasible both technically and economically.

- Provide a sound basis for source reduction and for planning and siting needed new facilities which offer alternatives to continued reliance on disposal of hazardous wastes in the air, water, or land.

- Encourage active involvement of the public, large and small industry, and civic and environmental organizations, in the development and implementation of this plan.

- Promote widespread ongoing education of citizens on hazardous materials and waste management issues. A program will be developed to educate households about their hazardous materials and wastes and the effects when they are discarded into solid waste landfills; this program should include ways to collect and treat household hazardous wastes effectively.

- Provide special attention to small firms and small generators which have special needs. Programs to provide technical and financial assistance will allow small firms to pursue waste reduction and the hierarchy. Such programs will be financially self-sustaining, yet with fees designed not to impose such a burden that it discourages participation and responsible hazardous waste management.

- Encourage onsite treatment of hazardous wastes in preference to offsite treatment. Where needed, however, offsite facilities should be located as close as practical to the sources of hazardous waste generation--within the limits reasonably imposed by economies of scale, market service areas, and environmental suitability (including consistency with this plan's siting criteria). In particular, transfer stations meet an important need, especially for the county's many small businesses.

- Recognize local agency responsibility to assist other governments in the region and state in planning for the effective management of hazardous wastes generated in the region and state in accordance with the hazardous waste management hierarchy. Local agencies will participate in and support efforts designed to allocate and develop facilities among all jurisdictions according to interjurisdictional agreements, each facility's environmental suitability, and each facility's economic viability.

- Local agencies should prepare to approve siting proposals in environmentally acceptable locations for modern treatment facilities, transfer stations, and residuals repositories sized to meet local needs and/or commitments in interjurisdictional agreements.

B. MAJOR ISSUES AFFECTING THE HAZARDOUS WASTE MANAGEMENT PLAN

In addition to the policies, a number of critical issues affect hazardous waste management, and preparation and implementation of the plan in Alameda County. The county's current and future hazardous waste stream must be understood and appropriate criteria for designating general areas in which facilities might be located must be developed and applied. Barriers include public concern over proposed nearby facilities, shortages in funding for data and staff, and the lack of local government experience in implementing the Tanner legislation. The public must be involved throughout the process.

Understanding County Current and Future Waste Streams: A major requirement of the planning effort involves evaluating the types and amounts of hazardous wastes currently being generated within Alameda County, and estimating production through 2000. This is a difficult task, given the uncertainties associated with current data and with economic projections and the complexities of new treatment standards being implemented.

Siting Criteria and Designation of General Areas: Under AB 2948, the siting criteria apply only to offsite, multi-user hazardous waste management facilities, including transfer stations, recycling and treatment facilities, incinerators, and residuals repositories. The siting criteria (Chapter 9) are based on the criteria in the DHS Guidelines for preparation of County Hazardous Waste Management Plans, but they reflect the characteristics and adopted policies of Alameda County as well. As recognized in the DHS Guidelines, some of the criteria are exclusionary, meaning that some or all types of hazardous waste facilities cannot be located in areas identified by these criteria. Others of the criteria are conditional, meaning that some or all types of facilities may be located there if they can meet certain conditions.

AB 2948 and the DHS Guidelines require that the County Hazardous Waste Management Plan must either show specific sites for hazardous waste facilities, or contain siting criteria and designated general areas in which hazardous waste facilities may be able to be located. The DHS requires that the Plans contain maps showing the county's siting criteria applied across the county area (to the extent that the criteria can be mapped) and composite maps showing designated general areas for different types of hazardous waste facilities. The Alameda County Hazardous Waste Management Plan contains maps showing designated general areas for different types and sizes of hazardous waste facilities. It is important to recognize that the designated general areas might meet general siting criteria but represent only the results of a first screening of county areas to eliminate those areas in which hazardous waste facilities can clearly not be located (such as wetlands). The fact that the Plan maps show designated general areas does not provide assurance

to a facility developer that the facility will be permitted to locate in that area nor does it imply a priori acceptance of siting in these general areas.

When a hazardous waste facility is proposed, the facility developer must demonstrate through the local permit process and environmental review that the specific facility at the specific site is appropriate and will be protective of public health and welfare and the environment. The facility developer must apply for a land use permit from the local jurisdiction (the city, or the county if in an unincorporated area). The local planning commission will review the proposal, and set forth its recommendations to the local government. The local government, with assistance from the developer of the proposed new facility, will comply with CEQA. A new Local Assessment Committee to be appointed by the local governing body (under AB 2948) will meet with the developer, assess the proposal, discuss appropriate mitigation strategies, and place its recommendations before the local government. A new statute allows the local government to acquire as compensation up to 10 percent of the gross receipts of the hazardous waste management facility.

The facility developer will also have to apply for all necessary federal and state permits to construct and operate the facility; including permits from EPA, DHS, RWQCB, and BAAQMD, and possibly from the Corps of Engineers, and BCDC and any other regulatory agencies that may have regulatory oversight/approval authority over the facility. New mechanisms for accelerated permit processing introduced by AB 2948 will ensure coordination and assistance from the Governor's Office of Planning and Research (OPR).

AB 2948 created a seven-member State Appeal Board composed of three state officials--the heads of Health Services, Air Resources Board, and Water Resources Control Board; a county supervisor and city council member serving statewide; and a county supervisor and city council member from the local area. Local decisions can be appealed by:

- The facility proponent, if the locality rejects the proposal (or approves it with onerous conditions tantamount to rejection).

- Any interested party (a person who participated in local hearings) concerned about the facility's impact on public health or the environment. The appeal must be based solely on the grounds that the conditions imposed on the project by land use decisions do not adequately protect the public health, safety, or welfare.

A developer must have all required state and federal permits which can be obtained prior to construction before the appeal can proceed.

Implementation: An Implementation program is included in this plan, as required by AB 2948. The strategy includes the following elements.

- Public participation and education programs
- Source reduction program
- Meeting small generators' special needs

- Dealing with household hazardous wastes
- Ongoing data collection and analysis
- Siting areas for new needed offsite, multi-user facilities

The Waste Management Authority (JPA) will continue to hold primary responsibility for the long-term process of hazardous waste planning and management in Alameda County. Chapter 10 includes a short and long range implementation program.

Public Participation: Involvement is sought from all sectors of the public, business, and local governments throughout the process of developing and implementing this plan. With release of the draft plan in March 1988, meetings were held throughout the county. Each city council received a public briefing; and a number of formal public hearings were held. Copies of the draft plan were available in public libraries, in County Supervisors' offices, and in city halls.

In sum, the planning process has followed a logical sequence of steps:

- Identify key issues for Alameda County hazardous waste management to 2000
- Set goals, policies, objectives
- Compile best data available
- Conduct public involvement/education
- Stimulate maximum feasible source reduction
- Determine needs for new facilities in the context of an interjurisdictional agreement
- Lay the basis for private sector siting decisions (and review the need for greater government role)
- Set milestones for actions by public agencies and the private sector
- Provide for effective program coordination

With these actions underway, Alameda County and the thousands of hazardous waste generators within it should be in a strong position to accelerate source reduction, phase out land disposal, and site those facilities needed to manage these wastes into the 21st century.

C. SCOPE OF PLAN

KINDS OF WASTES

This plan covers hazardous wastes: not municipal solid wastes (garbage), not radioactive wastes, not sewage sludge, not groundwater quality. Under California's Hazardous Waste Control Law (HWCL), passed in 1972 and amended on numerous occasions since, hazardous wastes are those which: cause increased mortality, serious irreversible illness or incapacitating reversible illness; or which pose substantial hazards to human health or the environment. DHS has issued regulations for determining hazardous wastes based on: toxicity; bioaccumulation; ignitability; reactivity; and corrosivity.

Extremely hazardous wastes, under DHS rules, are those which would cause death, disabling personal injury, or serious illness.

Restricted hazardous wastes form a subclass for purposes of bans on land disposal, and include hazardous wastes with cyanides, PCBs, strong acids, concentrated heavy metals, and so on. The plan covers past wastes, present wastes, and future wastes. It emphasizes protection of future needs (based on maximum feasible source reduction), working from 1986 data.

STATUTORY COVERAGE

This plan is primarily concerned with those laws specifically directed at hazardous wastes. These center around the general framework created by the California Hazardous Waste Control Law, which predated the analogous federal legislation, embodied in the Resource Conservation and Recovery Act of 1976 (RCRA)--which itself incorporates and expands a number of HWCL provisions. Similarly, a number of the expansions of the HWCL have been incorporated into federal law through subsequent amendments to RCRA.

The California Department of Health Services (DHS) is the state's lead agency implementing HWCL, and those provisions of RCRA which can be assumed by states that operate substantially equivalent programs. Between 1981 and January 1986, DHS implemented RCRA provisions under interim authorization from the EPA, which is the national lead agency for RCRA. This interim authorization expired in January 1986, but DHS continues to implement HWCL provisions under a reversion agreement with EPA while the state seeks final authorization. California allows county health departments the option to implement certain HWCL provisions regulating hazardous waste generators, under terms of Memoranda of Understanding (MOUs) with DHS. Alameda County Department of Environmental Services has an MOU with DHS.

Table 1-1 prepared in 1988 for the California Partnership for Safe Hazardous Waste Management provides a concise summary of these levels of necessary program coordination.

Table 1-1

HAZARDOUS MATERIALS PROGRAM MATRIX

CALIFORNIA COUNTIES FOUNDATION — IMPLEMENTATION REQUIREMENTS.

HAZARDOUS MATERIALS STORAGE CONTROL

HAZARDOUS MATERIALS LAW	PURPOSE/ OUTPUT	APPROACH/BASIC REQUIREMENTS	IMPLEMENTING AGENCIES (LOCAL/STATE)	COVERAGE	KEY DEADLINES	PERMITTING/ INSPECTION REQUIREMENTS	DATA MGMT. REQUIREMENTS	PUBLIC PARTICIPATION REQUIREMENTS	CRITICAL COORDINATION NEEDS	COMMENTS
STATE REGULATION OF UNDERGROUND STORAGE TANKS • Sher, Cortese Bills	• Regulates underground hazardous substance storage to prevent groundwater contamination	• Monitors existing and new tanks • Construction standards for new tanks after 1/1/84 • Unauthorized discharges reporting	• County • State Water Resources Control Board regulations • Regional Water Quality Control Board	• Hazardous materials and wastes stored underground	• 7/1/85 Deadline to install monitoring systems on existing tanks • 9/1/86 Deadline by which final permit was to be approved or denied.	• Permit required every 5 years • Annual report by permittee • Local agency inspection every 3 years	• State has maintained computerized data from permits	• None	• Report releases to RWQCB within 24 hours • Coordinate with Fire Code/Waters Bill, waste generator inspection • New RCRA program will establish federal requirements	• Exempts cities/counties with equivalent local ordinance as of 1/1/84
HAZARDOUS MATERIALS STORAGE AND EMERGENCY RESPONSE • Waters-AB 2185/2187 • Public "right-to-know"	• Regulates hazardous materials storage and emergency response planning	• County designates admin agency • Firms prepare business plans • County prepares area emergency response plan • Cities may assume implementation	• County (mandatory) • Cities (optional) • State office of Emergency Services regulations and approval of area plans	• Materials posing health and environmental hazards • Thresholds: Liquid-55 gal. Solid-500 lbs. Compressed Gas-200 cu. ft. (at STP)	• 3/1/87 Business plan, including plans for inspections and data mgmt to admin agency 1/1/88 if local program predated Water Bills • 12/31/87 Area plans, were due to State OES	• Business files annual inventory of max hazardous material (hazmat) amounts handled onsite; haz waste estimates • Periodic inspections	• Overall hazardous materials data management systems • Extensive data in business plans	• None • Public access to information	• Data collection crucial to AB 2948 planning • Coordinate with La Follette, waste general inspection UST regulation, SARA Title III	• Cities can self-designate • 69 cities self-designated statewide
ACUTELY HAZARDOUS MATERIALS RISK MANAGEMENT • La Follette Bill — AB 3777/1059	• Regulates storage and handling of acutely hazardous materialss	• Firms handling acute hazmats (AHMs) must file registration form • New/modified facilities with AHMs must prepare RMPP • Local admin agency may require RMPP from existing operations even if no modifications have been made • Exemptions available	• Local administering agency (same as Waters Bill) • State Office of Emergency Services	• Acutely hazardous materials defined by EPA (406 chemicals) • Same thresholds as Waters Bill	• 9/1/87 Registration forms available from Office of Emergency Services • 1/1/88 Registration forms due to administration agency • 1/1/88 Risk Management Prevention Program requirement in effect	• Inspections every 3 years	• None overall • Each facility keeps data	• None • Agency must coordinate public access • Risk Management Prevention Program includes offsite pessimistic case consequences assessment	• Waters Bill • Uniform Fire Code, especially Article 80 • SARA Title III • Building/planning departments	• Coordination with SARA Title III is a major issue
EMERGENCY PLANNING AND COMMUNITY "RIGHT-TO-KNOW" • SARA Title III (1986)	• Requires statewide and local emergency planning and public "right-to-know" for handling extreme hazmats	• Governor designates agencies and districts • EPA establishes emergency planning requirements	• State wide commission • Local planning committee	• Extremely hazardous substances defined by EPA (406 chemicals identical to La Follette Bill) • Additional reporting of other hazmats	• 5/17/87 Businesses were to notify state of extreme hazmat storage • 7/1/88 First annual business report of continuous releases • 10/17/88 Local emergency plan due	• No inspections • No permits	• None required • EPA to prepare data base of all continuous releases	• Information available to public • Local emergency planning commission	• La Follette Bill • Waters Bill • Uniform Fire Code, especially Article 80	• Coordination with state (Waters, La Follette Bills) and local (Uniform Fire Code) reporting and emergency response programs are major issues
UNIFORM FIRE CODE	• Contains articles regulating hazardous materials	• Model standards devised by Western Fire Chiefs Association (new requirements 1988 Uniform Fire Code)	• Local fire agencies	• All hazmat defined in Article 9, including toxic gases • Specific exemptions	• Revised Article 80 promulgated 8/87 (adopted locally)	• Inspection by fire prevention service (typically annual)	• None	• None	• La Follette Bill • Waters Bill • SARA Title III	• Discretionary program (local adoption) • Localities can adopt stricter requirements

OTHER TOXICS LAWS AND PROGRAMS

AFE DRINKING ATER AND OXICS ENFORCE-ENT ACT Proposition 65 (1986)	• Protects drinking water sources from future toxic contamination • Warns persons potentially exposed to toxics • Requires certain government employees to report discharges	• Develops list of chemicals known or suspected to cause cancer or reproductive damage • Precludes "knowing discharge" to drinking water sources • Shifts burden of proof to discharger regarding safety ("no risk" vs "safe use")	• Health and Welfare Agency (statewide) • County board of supervisors and county health officer	• Chemicals on list prepared by state • All hazardous waste for discharge reports	• 2/27/88 Exposure warnings on first list (end of grace period) • 10/27/88 No discharges of chemicals on first list unless "safe" (end of grace period) • 1/1/89 Government list of suspected cancer/reproductive toxicity (annual revisions)	• None	• State agencies provided initial data to counties (1/1/87)	• State Science Advisory Panel	• Link to source reduction priorities for listed chemicals • Link to La Follette Bill/SARA Title III	• Based on 1986 ballot initiative • Water companies exempt (Trihalomethane) • Implementation still uncertain • Extent of litigation • Civil penalties ($2500/day) • Criminal sanctions
RINKING WATER ONITORING AB 1803	• Monitors public drinking water wells for organic chemicals	• Requires water purveyors county health departments to test wells, report findings to state	• DHS—large drinking water systems (200 plus connections) • County health dept—small drinking water systems (5-199 connections)	• Tests for numerous chemicals and metals	• 119 major water systems tested in 1984-1985 • Small systems 1985-1988 • Ongoing	• None	• Department of Health Services received all data	• None	• Coordinated with groundwater protections and cleanup programs • Federal and state Superfund will remove risks to groundwater	• 18% of wells statewide had detectable contamination • Issue: public notification of detected drinking water contamination
XIC AIR ONTAMINANTS Tanner Bill AB 1807 Connelly/Stirling Bill AB 2588	• Controls risks of high priority toxic air contaminants • Sets standards • Develops emissions control regulations • Monitors toxic "hot spots"	• Scientific study of risks from toxic contaminants • Sets initial priorities for study (benzene first) • Moves to enforceable regulations	• ARB sets standards—input from Science Advance Board • Air Quality Management District/Air Pollution Control Districts—emissions control program	• 7 chemicals identified to date: asbestos, benzene, cadmium, dioxins, ethylene dichloride and hexavalent chromium	• Ongoing	• None until emissions requirements established	• Air Resources Board —air toxics data	• None	• Coordinated with federal Clean Air Act • Link to Prop 65 exposure warnings • RCRA/Calderon Bill regarding air emissions	• EPA controls other air toxics under Clean Air Act
DUSTRIAL ASTE RETREATMENT ROGRAMS Control toxic discharge into sewers	• Protects sewer systems from toxic contamination • Protects receiving waters from toxic contamination	• Sewer systems implement pretreatment program locally • National categorical standards under Clean Water Act (enforced locally)	• Regional Water Quality Control Board • Local sewerage agencies publicly owned treatment works	• Metals • Organics	• Ongoing	• Frequent inspection of each facility • Discharge permits required from publicly-owned treatment works	• Publicly owned treatment works — data on permit requirements and discharge characteristics	• None (some publicly owned treatment works have discharged advisory commission)	• Coordinated with all other inspections of same facilities (Waters, MOU, La Follette Bill, etc.)	• Underutilized potential for integration into broader toxics management effort
LEAN AIR ACT Basic air quality regulations	• Protects and enhances air quality • Attains National Ambient Air Quality Standards	• Sets NAAQS • Controls emissions from major stationary sources. • Controls auto emissions • Prevents significant deterioration of air quality	• APCD/AQMD for fixed sources; ARB for mobile sources (automobiles for example) • EPA sets national standards/approves SIP	• SO_2, NO_x, smog, lead, ozone • Toxic air emissions	• Ongoing at facility • 12/31/87 must meet all National Ambient Air Quality Standards (EPA may extend)	• Permits for all major facilities • Inspections	• Air Pollution Control District/Air Quality Management District maintains permit files	• Public hearings • Workshops • Formal public comments	• Coordinate with other inspections of same facilities • RCRA/Calderon Bill regarding air emissions	• EPA proposing to extend National Ambient Air Quality Standards compliance deadline far into the future
ATER QUALITY ONTROL ACT Porter-Cologne Act	• Protects surface and groundwater quality, to maintain "beneficial uses" of water	• Technical standards for all major discharges • Location standards to protect groundwater • Waste Discharge Requirements	• Regional Water Quality Control Board • State Water Resources Control Board	• Pollutants discharged to navigable waters by ind. or sewage plants • Regional "basin plans" for each hydrogeologic region	• Ongoing	• WDRs allow discharge to groundwater • NPDES Permits regulate discharge to surface waters • Self-reporting	• Regional Water Quality Control Board maintains permit data	• Regional Water Quality Control Board meetings public	• Underground storage tank regulation • Waters Bill • La Follette Bill • Generator inspections • RCRA	• Controls over toxic discharges included in basic permits
ESTRICTED ATERIALS Pesticide Contamination Prevention Act and Restricted Materials Act	• Prevents contamination of groundwater • Regulates use of materials	• Pre-use registration of pesticides • Registration of specific applications of pesticides	• State Department of Food and Agriculture sets standards • County agricultural commissioners enforce	• Pesticide contaminants and other organic chemicals • State list of restricted materials	• Ongoing	• Annual registration permits (notice required before applying) • Inspection onsite	• DFA, county commissioners receive reports from pesticide applicators • Additional conditions may be put on landowners	• None	• EPA standards • Groundwater protection programs	• New restricted materials need state approval
NFECTIOUS ASTE Infectious Waste Control	• Controls spread of infectious disease	• State regulations governing treatment and disposal • Local enforcement	• County Environmental Health Division • State DHS	• Infectious waste	• Ongoing	• DHS (permit) • County (inspection)	• None	• None	• Calderon Bill	• None

Table 1-1

HAZARDOUS WASTE REGULATION

COUNTY HAZARDOUS WASTE MANAGEMENT PLANS • Tanner Bill — AB 2948	• County haz waste mgmt plans • Accelerated permitting of new haz waste mgmt facilities • Appeals process can override local siting decisions	• County plans approved by cities/DHS • County haz waste management plans adopted into local plans • Subsequent facility siting consistent with county plans • 7-member State Appeals Board	• Counties prepare CHWMP • State guidelines approval of plans by DHS/TSCD • Local advisory committee with specific functions	• All hazardous wastes generated within the county • 1987 volumes and types • Projections to 1994, 2000	• 6/30/87 Department of Health Services guidelines issued • 12/31/87 Draft county plans due to DHS • 10/1/88 final county plans due to DHS	• None	• No final requirement, but overall hazardous waste data necessary to prepare and update county plan	• Advisory commission outreach in 1987 • Public hearings 1988 plan approval process	• Memorandum of Understanding (MOU) inspections • Waters/La Follette, RCRA/MOU data • Facility siting needs	• Non-mandatory, but threat of state override of local land use decisions • Not yet clear how county, regional haz waste plans will fit together • Plans are to reflect haz waste hierarchy
FEDERAL REGULATION OF HAZARDOUS WASTES • RCRA, HSWA	• Regulates hazardous waste generators, transporters, treatment, storage and disposal facilities • "Cradle-to-grave" regulation	• Permits/TSD facilities • Technical standards • Groundwater monitoring requirements • Generator manifests • HSWA shifts to treatment and requirements for underground tanks	• California not authorized by EPA to assume full RCRA authority; TSCD at the DHS carries out selected permitting/inspections • No formal direct local gov role (but DHS signs MOU for county permits and inspections)	• Hazardous wastes defined by EPA • Storage is to 90 days	• 11/8/84 All landfills opened after this date require double-lining, leachate collection, monitoring systems • Deadlines for land disposal phaseout: 1985-1992 for different wastes	• Department of Health Services inspects treatment, storage and disposal every 1 or 2 years	• Department of Health Services transportation "manifest" data	• None	• MOU generator inspections • Haz Waste Mgmt planning (AB 2948- Tanner Bill) • State underground storage tank, landfill, toxic pit regulations • Federal and state Superfund	• Need to relate county hazardous waste planning to federal/state regulatory efforts • Corrective action for cleanup when needed • Citizen lawsuits authorized
FEDERAL TOXIC CLEANUP LAW • CERCLA (Superfund) 1980 • SARA (amendments) 1986	• Locates, assesses and cleans up potentially hazardous sites • Funded by responsible parties or Superfund • Outlines strict liability to original haz generator and transporter	• Removal and remedial actions • National Priority List • Remedial investigation and Feasibility Study analysis	• EPA region 9 • "Slant load" cleanups by Toxic Substances Control Division of the Department of Health Services • No direct local role	• Hazardous waste sites high on Hazard Ranking System	• Site specific • Delays are typical – litigation – technical complexity	• EPA monitors cleanup progress, with Regional Water Quality Control Board and Department of Health Services	• Extensive data available to Department of Health Services/EPA on individual sites, but little data aggregated across sites	• 1986 SARA request for more public involvement • Local advisory committee established for specific sites • Community relations effort	• Coordinated with ground water protection and drinking water monitoring • State Superfund program supplements, provides required state funding	• Fed cleanup standards plus state and local standards apply • Strong enforcement powers • Citizen lawsuits authorized • Permanent treatment preferred • No local permits for onsite remedial actions
STATE SUPERFUND • Hazardous Substance Account Act	• Provides a 10% state share at NPL sites • Accelerate private cleanup of sites not on NPL • Provides state funds for cleanup of abandoned sites not on NPL	• Identify and rank sites (state list) • Remedial investigation and Feasibility Study analysis • Cleanup	• DHS/Toxic Substances Control Division (regional offices)	• 400 sites on state list	• Ongoing	• Department of Health Services/Toxic Substances Control Division	• Department of Health Services data	• County participation (optional) • Remedial action plan	• Coordinated with federal Superfund/groundwater protection	• Standards for groundwater cleanup vary among Regional Water Quality Control Boards • New pilot program for local oversight underground storage tank cleanup
TOXIC PITS CLEANUP ACT • Katz Bill - AB 3566/3121	• Limits use of surface impoundments for hazardous waste management • Protects groundwater	• Impoundments within ¼ mile of drinking water source must close unless an exemption is received • Other impoundments need double liners, leachate collection, groundwater monitoring systems	• Regional Water Quality Control Board renews exemption requests • No direct local role	• All surface impoundments	• RWQCB to act on all exemption requests by 12/31/87 • Impoundments within ¼ mile must close by 6/30/91 unless exempt (5 year max.) • Other impoundments must meet technical standards by 6/30/88 (permits required)	• Regional Water Quality Control Board	• Regional Water Quality Control Board: data on surface impoundments	• Regional Water Quality Control Board public hearings	• Coordinated with other groundwater protection actions • Tanner Bill planning (AB 2948) • RCRA	• n/a
STATE REGULATIONS OF HAZARDOUS SOLID WASTE DISPOSAL • Calderon Bill AB 3525/3374 • Eastin Bill AB 2448	• Calderon Bill requires air emissions and leachate testing from all existing/former solid waste sites • Eastin Bill creates new solid waste Superfund	• Priority rankings of sites for water and air quality assessments • $100 million in new solid waste cleanup account	• RWQCB for leachate; AQMD and APCD for air emissions • No direct local role • Facility owner conducts the tests • CWMB administers Eastin Bill	• All solid waste disposal sites	• 1/1/88 Eastin Bill applies to solid waste sites active as of that date • 1/1/89 Landfill operators must certify compliance with planning, financial responsibility requirements	• Department of Health Services issues permits; county reviews • Inspections (county or city)	• Regional Water Quality Control Board and Air Quality Management District/Air Pollution Control District must have data available	• None	• Relate to CSWMP • Requires coordinated RWQCB/APCD activities • CWMB grants available for local household hazardous waste programs	• New account responds to extensive remedial action needs
STATE HAZARDOUS WASTE REQUIREMENTS • State Hazardous Waste Control Law	• Ensures hazardous waste generator compliance with RCRA/HSCL	• DHS administers with some federal requirements • County health departments may sign MOU with DHS to permit and inspect most generators	• DHS administers statewide • County or city health department, under MOU agreement with the DHS	• All haz waste generators, transporters, TSD facilities • MOU covers haz waste generators (defined by EPA/DHS), except permitted TSD Facilities	• Flexible	• Annual inspections	• None	• None	• Tanner Bill planning (AB 2948) • Other hw programs (UST regulations, RCRA, Waters Bill, La Follette Bill, etc.)	• Local agency does not inspect facility holding RCRA TSD permits • Inspections can encourage waste reduction
LAND DISPOSAL PHASEOUT • Robert Bill SB 1500	• Accelerates transition from land disposal to hazardous waste treatment	• Prohibits disposal of untreated liquid waste in any hazardous waste landfill • Prohibits land disposal of untreated wastes (except from site cleanups)	• Department of Health Services/Toxic Substances Control Division • No direct local role	• All hazardous wastes (as defined by DHS)	• 5/8/90 Deadline for disposal of untreated wastes—Department of Health Services treatment standards effective (extend to 5/8/92)	• None	• None	• None	• Tanner Bill planning (AB 2948) • Siting hw treatment facilities • Related to federal HSWA/RCRA land disposal bans	• DHS sets criteria/adopts treatment standards • 2 year extensions if no treatment exists—DHS likely to change deadlines to match federal deadlines (1992)
TECHNICAL AND FINANCIAL ASSISTANCE TO HW REDUCTION • Farr Bill AB 885/1981 • Killea Bill AB 2486/2490 • Garamendi Bill SB 798 • Bronzan Bill AB 2234	• Provides funding, information intended to accelerate hazardous waste reduction/recycling and treatment	• Farr: RD & D grants • Killea: county consulting (AB 2490) • Department of Health Services consultation (AB 2490) • Garamendi: loans, loan guarantees	• DHS: Office of Small Business • U of C internships • Counties • Local small business development corporation	• Varies with expanding focus on small hazardous waste generators	• Ongoing (annual cycle typical)	• None	• None	• None	• RCRA/HWCL • Toxic pits, solid waste landfill programs • Household hazardous waste programs	• Attempt to assist technology development and adoption and information dissemination • Increasing focus on small and household hazardous waste generation
HOUSEHOLD HAZARDOUS WASTE MANAGEMENT	• Encourages safe disposal of HHW • Educates public regarding house-	• County Solid Waste Management Plans must include program for safe management of household hazardous	• County in conjunction with the cities • CWMB guidelines for county programs	• Household hazardous wastes	• Variable: next CSWMP revision to include HHW program • 1/1/89 CWMB reports to	• None	• None	• State advisory commission • State Department of Education to distribute HHW	• Include in CSWMP • Tanner Bill planning (AB 2948)	• None

D. STRUCTURE OF THE PLAN

The Alameda County Hazardous Waste Management Plan has six sections. Section I is designed to provide the reader with background on hazardous waste issues, relevant legislation, and the planning process (Chapter 1). This section also sets out the policy direction for hazardous waste management in Alameda County: goals and policies to be followed (Chapter 2).

Section II provides a comprehensive overview of current hazardous waste management in this county. Patterns of waste generation in 1986 are summarized in Chapter 3: types and volumes of wastes; types and locations of generators. This chapter discusses wastes sent offsite with DHS manifests; wastes sent for recycling (oils and solvents); wastes generated by small businesses; household hazardous wastes; and wastes from cleanup of remedial action locations and from leaking underground storage tanks.

In Chapter 4, the various waste management practices are described. Here onsite hazardous waste source reduction, storage, recycling, and treatment activities are summarized. Descriptions are presented of the principal land disposal and treatment facilities receiving wastes from Alameda County generators in 1986: in Contra Costa, Solano, Kings, and Santa Barbara Counties.

Chapter 5 presents basic information on the many existing regulatory programs affecting hazardous waste management. The chapter includes hazardous waste programs; hazardous materials programs; and air quality and water quality programs.

In Section III, the focus of the analysis shifts from the present to the future: expected patterns of hazardous waste management in 2000. Chapter 6 reviews basic factors affecting hazardous waste issues in Alameda County in the next ten or more years: public concerns, national and state policy, and economic factors. Tensions between public and private roles, between onsite and offsite waste management, between new firms and existing ones, and among source reduction, treatment, and land disposal are all addressed.

Chapter 7 contains basic projections of hazardous waste generation in 2000. This involves alterations to the 1986 baseline data to account for economic growth, and then to show the impact of alternative levels of anticipated source reduction and recycling. This chapter includes three different protections:

- An economic forecast, without any source reduction
- A market-driven protection, with moderate source reduction
- A projection reflecting aggressive source reduction, and assuming effective implementation of a series of local government efforts at both new facilities and at existing plants.

Each projection defines waste stream quantities by types of wastes, locations of generators, and types of industries generating the wastes.

In Chapter 8, these data are translated into a needs assessment. Waste stream profiles for 2000 are structured to assess Alameda County's probable needs for new transfer stations, treatment facilities of several kinds, hazardous waste incinerators, and residuals repository, with sufficient capacity to ensure flexibility to meet unanticipated problems. It is essential to note, however, that the needs analysis shown in Chapter 8 has been superseded by the facility allocation process currently being conducted by the San Francisco Bay Area Hazardous Waste Management Capacity Allocation Committee (CAC) of the Association of Bay Area Governments, as part of the effort to develop an interjurisdictional agreement among the nine Bay Area counties for siting new hazardous waste facilities.

As part of the interjurisdictional agreement, the CAS has developed a Capacity Allocation Plan for providing the capacity necessary to manage hazardous waste in the region. The Capacity Allocation Plan is based on a "Fair Share" method for allocating responsibility within the jurisdictional boundaries of the memeber counties. The Capacity Allocation Plan shows that the nine-county region will have an overall hazardous waste management capacity deficit of about 195,000 tons in 2000, assuming existing capacity remains and no new capacity is added. The Capacity Allocation Plan distributes responsibility for filling the regional capacity deficit among the participating counties based upon their contribution to the deficit. According to the Capacity Allocation Plan, Alameda County is responsible for providing siting opportunities for managing continued hazardous waste recycling capacity in the region.

Chapter 9 contains siting criteria for the different types of hazardous waste facilities and maps showing the application of those siting criteria to the County area. It also contains composite maps showing designated general areas in which hazardous waste facilities might be able to be sited.

Section IV of the Plan, Chapter 10 presents the Implementation Program for achieving hazardous waste minimization; it includes recommendations on the roles of local jurisdictions and the composition, responsibilities, and funding for a Hazardous Waste Minimization Committee.